

# Water and Wastewater Project

## Reference Manual for Consulting Engineers

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UNITED STATES  
DEPARTMENT OF  
AGRICULTURE

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April 8, 2004

SUBJECT: Water & Wastewater Consulting Engineers Reference Manual for USDA Rural Development Financed Projects Located in Idaho

TO: Consulting Engineers Working on USDA Rural Development Projects

The Idaho State Office of USDA, Rural Development has developed this Reference Manual for use by Consulting Engineers working on water, wastewater, storm water and solid waste projects partially or wholly funded by our agency. The manual contains flow charts, document lists, contacts, examples of documents, Rural Development bulletins, instructions and forms. The information in the manual is intended to guide the engineer through the Rural Development process from the initial application to the final inspection and warranty inspection.

A general overview of the engineer's responsibilities is outlined in the flow chart contained in Section 1.0. The subsequent sections provide the engineer more specific guidance on how to prepare the documents outlined in the flow chart.

All Rural Development instructions, forms and bulletins can be copied and used as necessary. All EJCDC documents used must be valid licensed copies. All projects wholly or partially funded by Rural Development must use the documents contained and described within this manual. If deviation from the documents specified herein is desired, Rural Development State Office approval must be obtained.

Updates to the manual will be available on USDA Rural Developments Idaho website at <http://www.rurdev.usda.gov/id/RUSManuals.htm>. Updated sections within the manual will be highlighted in the bookmark portion of the PDF file. Before each project check the revision date of your manual or last download and, if necessary, download any updates. The updated sections can be printed and inserted into this bound hard copy.

An Idaho Rural Development, Community Programs staff phone directory is contained in Section 1.0. If you have any questions concerning our program please contact the appropriate Area Office or the State Office for assistance.

Sincerely,

//Signed//

DANIEL H. FRASER  
Director, Community Programs

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# Water and Wastewater Project

## Reference Manual for Consulting Engineers

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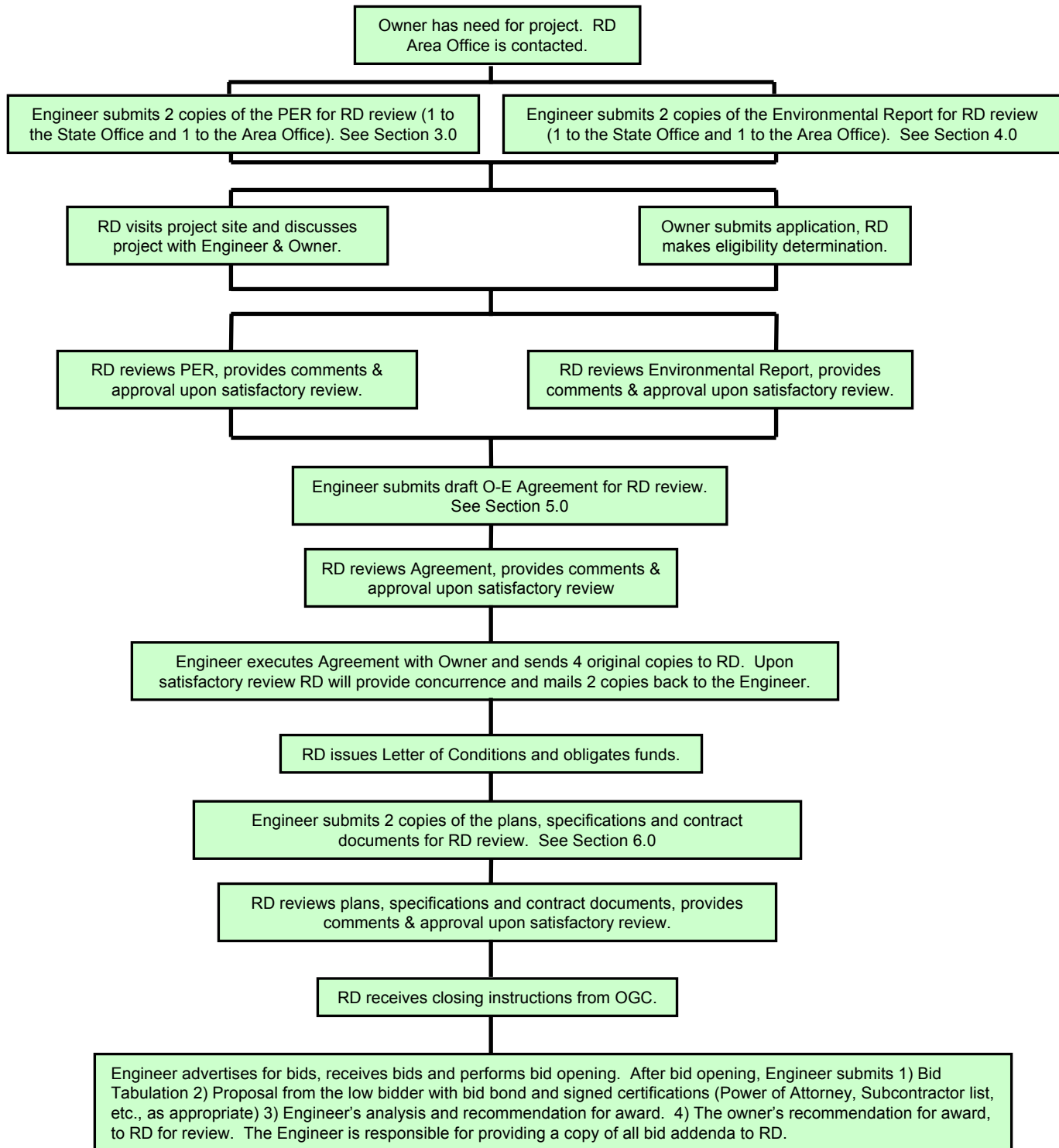
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# **SECTION 1.0**

## **Process Flow Chart & Contacts**

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# Water & Wastewater Consulting Engineer Flow Chart



Flow Chart continued  
on next page

**Flow Chart continued  
from previous page**



Upon satisfactory review of the bid documents, RD will provide a letter of concurrence for award.

Owner issues Notice of Award. Engineer prepares and sends to RD 5 original copies of the Agreement (signed by owner and contractor), Performance and Payment bonds, Power of Attorney, Certificates of Insurance (as required in contract) and Certificate of Owner's Attorney. All items must be bound with the contract documents and sent to RD Area Office for review, then submitted to State Office for concurrence.

Upon satisfactory review of bound contracts, RD will provide agency concurrence and mail 3 originals back to the Engineer for distribution to owner and contractor.

Prior to the preconstruction conference, the engineer must submit a resume of qualifications of the resident inspector to the owner and to RD for acceptance in writing. Full-time resident inspection is required for all construction unless a written exception is made by RD upon written request of the owner. The resident inspector is required to maintain a record of daily construction progress.

Pre-construction conference is held with Engineer, RD, owner, contractor, significant subcontractors and others as needed.

Owner issues Notice to Proceed.

Invoices for payment of construction costs must be approved by the owner, project engineer and concurred in by RD. Typically this will be done on a monthly basis.

Any change orders that may arise during the course of construction must be clearly identified and explained through use of EJCDC C-941. All change orders must be approved by the owner, project engineer and concurred in by RD. In order to be approved, the change order must be justified and cost reasonable.

A prefinal inspection will be made by the owner, resident inspector, project engineer, contractor, representatives of other agencies involved and RD representatives, generally both Area and State Office. The inspection results will be recorded by the project engineer and a copy provided to all interested parties.

Engineer executes EJCDC C-625 "Certificate of Substantial Completion" and provides copy to RD.

A final inspection will be made by RD before final payment is concurred in.

Engineer delivers as-built plans and O&M manuals to the owner.

Engineer, Owner and RD representative perform 11 month inspection. If no items of concern are noted during the inspection the project is complete.



**USDA, RURAL DEVELOPMENT**  
**Community Programs**  
**IDAHO DIRECTORY**

**STATE OFFICE:** 9173 W. Barnes, Suite A1, Boise, ID 83709-1555  
Fax No: (208) 378-5643

**STATE DIRECTOR:** Michael A. Field

**RURAL UTILITIES & COMMUNITY FACILITIES STATE STAFF:**

|                                  |                    |
|----------------------------------|--------------------|
| Daniel H. Fraser, Director       | (208)378-5617      |
| Catherine D. Chivers, Specialist | (208) 378-5619 x 2 |
| F. Gary Hayne, Engineer          | (208) 378-5619 x 1 |
| Noel J. LaRoque, Engineer        | (208) 378-5619 x 3 |
| Janus Arnold, Technician         | (208) 378-5618     |

**Northern Idaho Area Office (1)**

|                                |                            |
|--------------------------------|----------------------------|
| 7830 Meadowlark Way, Ste C3    | (208) 762-4939             |
| Coeur D'Alene, ID 83815        | <b>Fax:</b> (208) 762-9799 |
| Morris E. Cavasar, Manager     | <b>Ext:</b> 126            |
| (Vacant), Specialist           | 117                        |
| Jeffery T. Beeman, Specialist  | 118                        |
| Shirley Quakkelaar, Technician | 116                        |

***Counties Served:*** *Benewah, Bonner, Boundary, Clearwater, Idaho, Kootenai, Latah, Lewis, Nez Perce and Shoshone.*

**Western Idaho Area Office (2)**

|                             |                            |
|-----------------------------|----------------------------|
| 2208 E. Chicago St., Ste C  | (208) 459-0761             |
| Caldwell, ID 83605          | <b>Fax:</b> (208) 459-0762 |
| M. Stewart Brent, Manager   | <b>Ext:</b> 113            |
| David Flesher, Specialist   | 116                        |
| Thelma Garrison, Technician | 123                        |

***Counties Served:*** *Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley & Washington*

**Central Idaho Area Office (3)**

|                             |                            |
|-----------------------------|----------------------------|
| 1441 Fillmore, Ste C        | (208) 733-5380             |
| Twin Falls, ID 83301        | <b>Fax:</b> (208) 734-0428 |
| Larry Stachler, Manager     | <b>Ext:</b> 120            |
| Terry Stigile, Specialist   | 118                        |
| Diane Shigihara, Technician | 114                        |

***Counties Served:*** *Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, & Twin Falls*

**Eastern Idaho Area Office (4)**

|                               |                            |
|-------------------------------|----------------------------|
| 725 Jensen Grove Dr., Ste 1   | (208) 785-5840             |
| Blackfoot, ID 83221           | <b>Fax:</b> (208) 785-6561 |
| Gary C. Gamble, Manager       | <b>Ext:</b> 119            |
| R. Craig Thurgood, Specialist | 115                        |
| Patricia Casella, Technician  | 101                        |

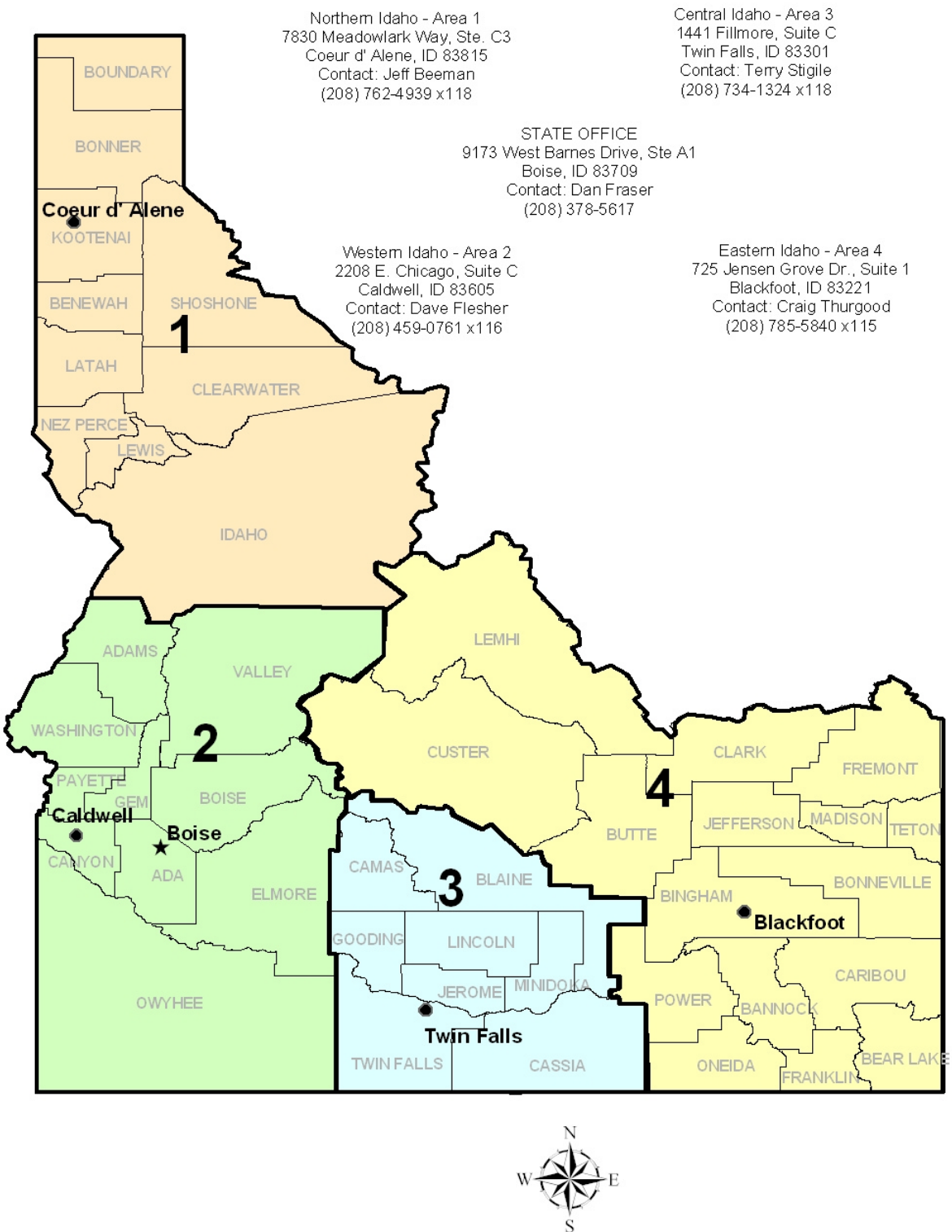
***Counties Served:*** *Bannock, Bear Lake, Bingham, Bonneville, Butte, Caribou, Clark, Custer, Franklin, Fremont, Jefferson, Lemhi, Madison, Oneida, Power & Teton*

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# Community Programs

## Office Locations and Areas



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# **SECTION 2.0**

## **Water & Wastewater Regulations 1780 Subpart C**

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**PART 1780 - WATER AND WASTE LOANS AND GRANTS****SUBPART C****Table of Contents**

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Authority: 5 U.S.C. 301; 7 U.S.C. 1989; 16 U.S.C. 1005.

## Subpart C - Planning, Designing, Bidding, Contracting, Constructing and Inspections

§1780.53 General.

This subpart is specifically designed for use by owners including the professional or technical consultants or agents who provide assistance and services such as engineering, environmental, inspection, financial, legal or other services related to planning, designing, bidding, contracting, and constructing water and waste disposal facilities. These procedures do not relieve the owner of the contractual obligations that arise from the procurement of these services. For this subpart, an owner is defined as an applicant, borrower, or grantee.

§1780.54 Technical services.

Owners are responsible for providing the engineering, architect and environmental services necessary for planning, designing, bidding, contracting, inspecting, and constructing their facilities. Services may be provided by the owner's "in house" engineer or architect or through contract, subject to Agency concurrence. Engineers and architects must be licensed in the State where the facility is to be constructed.

§1780.55 Preliminary engineering reports and Environmental Reports.

Preliminary engineering reports (PERs) must conform to customary professional standards. PER guidelines for water, sanitary sewer, solid waste, and storm sewer are available from the Agency. Environmental Reports must meet the policies and intent of the National Environmental Policy Act and RUS procedures. Guidelines for preparing Environmental Reports are available in RUS Bulletin 1794A-602. **[Revision 2, 06/04/99]**

## §1780.56 [Reserved]

§1780.57 Design policies.

Facilities financed by the Agency will be designed and constructed in accordance with sound engineering practices, and must meet the requirements of Federal, State and local agencies.

(a) Environmental review. Facilities financed by the Agency must undergo an environmental impact analysis in accordance with the National Environmental Policy Act and RUS procedures. Facility planning and design must not only be responsive to the owner's needs but must consider the environmental consequences of the proposed project. Facility design shall incorporate and integrate, where practicable, mitigation measures that avoid or minimize adverse environmental impacts. Environmental reviews serve as a means of assessing environmental impacts of project proposals, rather than justifying decisions already made. Applicants may not take any action on a project proposal that will have an adverse environmental impact or limit the choice of reasonable project alternatives being reviewed prior to the completion of the Agency's environmental review.

**[Revision 1, 12/11/98]**

Revision 2

(b) Architectural barriers. All facilities intended for or accessible to the public or in which physically handicapped persons may be employed must be developed in compliance with the Architectural Barriers Act of 1968 (42 U.S.C 4151 et seq.) as implemented by 41 CFR 101-19.6, section 504 of the Rehabilitation Act of 1973 (42 U.S.C. 1471 et seq.) as implemented by 7 CFR parts 15 and 15b, and Titles II and III of the Americans with Disabilities Act of 1990.

(c) Energy/environment. Facility design should consider cost effective energy-efficient and environmentally-sound products and services.

(d) Fire protection. Water facilities should have sufficient capacity to provide reasonable fire protection to the extent practicable.

(e) Growth capacity. Facilities should have sufficient capacity to provide for reasonable growth to the extent practicable.

(f) Water conservation. Owners are encouraged, when economically feasible, to incorporate water conservation practices into a facility's design. For existing water systems, evidence must be provided showing that the distribution system water losses do not exceed reasonable levels.

(g) Conformity with state drinking water standards. No funds shall be made available under this part for a water system unless the Agency determines that the water system will make significant progress toward meeting the standards established under title XIV of the Public Health Service Act (commonly known as the 'Safe Drinking Water Act') (42 U.S.C. 300f et seq.).

(h) Conformity with federal and state water pollution control standards. No funds shall be made available under this part for a water treatment discharge or waste disposal system unless the Agency determines that the effluent from the system conforms with applicable Federal and State water pollution control standards.

(i) Combined sewers. New combined sanitary and storm water sewer facilities will not be financed by the Agency. Extensions to existing combined systems can only be financed when separate systems are impractical.

(j) Dam safety. Projects involving any artificial barrier which impounds or diverts water, or the rehabilitation or improvement of such a barrier, must comply with the provisions for dam safety as set forth in the Federal Guidelines for Dam Safety (Government Printing Office stock No. 041-001-00187-5, Superintendent of Documents, Attn: New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954) as prepared by the Federal Coordinating Council for Science, Engineering and Technology.

(k) Pipe. All pipe used shall meet current American Society for Testing Materials (ASTM) or American Water Works Association (AWWA) standards.

(l) Water system testing. For new water systems or extensions to existing water systems, leakage shall not exceed limits set by either ASTM or AWWA whichever is the more stringent.

(m) Metering devices. Water facilities financed by the Agency will have metering devices for each connection. An exception to this requirement may be granted by the State program official when the owner demonstrates that installation of metering devices would be a significant economic detriment and that environmental considerations would not be adversely affected by not installing such devices. Sanitary sewer projects should incorporate water system metering devices whenever practicable.

(n) Economical service. The facility's design must provide the most economical service practicable.

(o) Seismic safety. All new structures, fully or partially enclosed, used or intended for sheltering persons or property will be designed with appropriate seismic safety provisions in compliance with the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.), and Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction (3 CFR 1990 Comp., p. 269). Designs of components essential for system operation and substantial rehabilitation of structures that are used for sheltering persons or property should incorporate seismic safety provisions to the extent practicable. RUS implementing regulations for seismic safety are in 7 CFR part 1972, subpart C. **[Added, revision 2, 06/04/99]**

§§1780.58 - 1780.60 [Reserved]

§1780.61 Construction contracts.

Contract documents must be sufficiently descriptive and legally binding in order to accomplish the work as economically and expeditiously as possible.

(a) Standard construction contract documents. If the construction contract documents utilized are not in the format previously approved by the Agency, OGC's review of the construction contract documents will be obtained prior to their use.

(b) Contract review and concurrence. The owner's attorney will review the executed contract documents, including performance and payment bonds, and will certify that they are adequate, and that the persons executing these documents have been properly authorized to do so. The contract documents, engineer's recommendation for award, and bid tabulation sheets will be forwarded to the Agency for concurrence prior to awarding the contract. All contracts will contain a provision that they are not effective until they have been concurred in by the Agency. The State program official or designee is responsible for concurring in construction contracts with the legal advice and guidance of the OGC when necessary.

§1780.62 Utility purchase contracts.

Applicants proposing to purchase water or other utility service from private or public sources shall have written contracts for supply or service which are reviewed and concurred in by the Agency. To the extent practical, the Agency review and concurrence of such contracts should take place prior to their execution by the owner. OGC advice and guidance may be requested. Form RD 442-30, "Water Purchase Contract," may be used when appropriate. If the Agency loan will be repaid from system revenues, the contract will be pledged to the Agency as part of the security for the loan. Such contracts will:

Revision 2



- (a) Include a commitment by the supplier to furnish, at a specified point, an adequate quantity of water or other service and provide that, in case of shortages, all of the supplier's users will proportionately share shortages.
- (b) Set out the ownership and maintenance responsibilities of the respective parties including the master meter if a meter is installed at the point of delivery.
- (c) Specify the initial rates and provide a type of escalator clause which will permit rates for the association to be raised or lowered proportionately as certain specified rates for the supplier's regular customers are raised or lowered. Provisions may be made for altering rates in accordance with the decisions of the appropriate State agency which may have regulatory authority.
- (d) Cover period of time which is at least equal to the repayment period of the loan. State program officials may approve contracts for shorter periods of time if the supplier cannot legally contract for such period, or if the owner and supplier find it impossible or impractical to negotiate a contract for the maximum period permissible under State law, provided:
  - (1) The supplier is subject to regulations of the Federal Energy Regulatory Commission or other Federal or State agency whose jurisdiction can be expected to prevent unwarranted curtailment of supply; or
  - (2) The contract contains adequate provisions for renewal; or
  - (3) A determination is made that in the event the contract is terminated, there are or will be other adequate sources available to the owner that can feasibly be developed or purchased.
- (e) Set out in detail the amount of connection or demand charges, if any, to be made by the supplier as a condition to making the service available to the owner. However, the payment of such charges from loan funds shall not be approved unless the Agency determines that it is more feasible and economical for the owner to pay such a connection charge than it is for the owner to provide the necessary supply by other means.
- (f) Provide for a pledge of the contract to the Agency as part of the security for the loan.
- (g) Not contain provisions for:
  - (1) Construction of facilities which will be owned by the supplier. This does not preclude the use of money paid as a connection charge for construction to be done by the supplier.
  - (2) Options for the future sale or transfer. This does not preclude an agreement recognizing that the supplier and owner may at some future date agree to a sale of all or a portion of the facility.
- (h) If it is impossible to obtain a firm commitment for either an adequate quantity or sharing shortages proportionately, a contract may be executed and concurred in provided adequate evidence is furnished to enable the Agency to make a determination that the supplier has adequate supply and/or treatment facilities to furnish its other users and the applicant for the foreseeable future; and:

- (1) The supplier is subject to regulations of the Federal Energy Regulatory Commission or other Federal or State agency whose jurisdiction can be expected to prevent unwarranted curtailment of supply; or
- (2) A suitable alternative supply could be arranged within the repayment ability of the borrower if it should become necessary; or
- (3) Concurrence in the proposed contract is obtained from the National Office.

§1780.63 Sewage treatment and bulk water sales contracts.

Owners entering into agreements with private or public parties to treat sewage or supply bulk water shall have written contracts for such service and all such contracts shall be subject to the Agency concurrence. Section 1780.62 should be used as a guide to prepare such contracts.

§§1780.64 - 1780.66 [Reserved]

§1780.67 Performing construction.

Owners are encouraged to accomplish construction through contracts with qualified contractors. Owners may accomplish construction by using their own personnel and equipment provided the owners possess the necessary skills, abilities and resources to perform the work and provided a licensed engineer prepares design drawings and specifications and inspects construction and furnishes inspection reports as required by §1780.76. Inspection services may be provided by individuals as approved by the State staff engineer. Payments for construction will be handled under §1780.76(e).

§1780.68 Owner's contractual responsibility.

This part does not relieve the owner of any responsibilities under its contract. The owner is responsible for the settlement of all contractual and administrative issues arising out of procurement entered into in support of a loan or grant. These include, but are not limited to: source evaluation, protests, disputes, and claims. Matters concerning violation of laws are to be referred to the applicable local, State, or Federal authority.

§1780.69 [Reserved]

§1780.70 Owner's procurement regulations.

Owner's procurement requirements must comply with the following standards:

- (a) Code of conduct. Owners shall maintain a written code or standards of conduct which shall govern the performance of their officers, employees or agents engaged in the award and administration of contracts supported by Agency funds. No employee, officer or agent of the owner shall participate in the selection, award, or administration of a contract supported by Agency funds if a conflict of interest, real or apparent, would be involved. Examples of such conflicts would arise when: the employee, officer or agent; any member of their immediate family; their partner; or an organization which employs, or is about to employ, any of the above; has a financial or other interest in the firm selected for the award.

(1) The owner's officers, employees or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to subagreements.

(2) To the extent permitted by State or local law or regulations, the owner's standards of conduct shall provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the owner's officers, employees, agents, or by contractors or their agents.

(b) Maximum open and free competition. All procurement transactions, regardless of whether by sealed bids or by negotiation and without regard to dollar value, shall be conducted in a manner that provides maximum open and free competition. Procurement procedures shall not restrict or eliminate competition. Examples of what are considered to be restrictive of competition include, but are not limited to: placing unreasonable requirements on firms in order for them to qualify to do business; noncompetitive practices between firms; organizational conflicts of interest; and unnecessary experience and bonding requirements. In specifying materials, the owner and its consultant will consider all materials normally suitable for the project commensurate with sound engineering practices and project requirements. The Agency shall consider fully any recommendation made by the owner concerning the technical design and choice of materials to be used for a facility. If the Agency determines that a design or material, other than those that were recommended should be considered by including them in the procurement process as an acceptable design or material in the water or waste disposal facility, the Agency shall provide such owner with a comprehensive justification for such a determination. The justification will be documented in writing.

(c) Owner's review. Proposed procurement actions shall be reviewed by the owner's officials to avoid the purchase of unnecessary or duplicate items. Consideration should be given to consolidation or separation of procurement items to obtain a more economical purchase. Where appropriate, an analysis shall be made of lease versus purchase alternatives, and any other appropriate analysis to determine which approach would be the most economical. To foster greater economy and efficiency, owners are encouraged to enter into State and local intergovernmental agreements for procurement or use of common goods and services.

(d) Solicitation of offers, whether by competitive sealed bid or competitive negotiation, shall:

(1) Incorporate a clear and accurate description of the technical requirements for the material, product or service to be procured. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a "brand name or equal" description may be used to define the performance or other salient requirements of a procurement. The specific feature of the name brands which must be met by the offeror shall be clearly stated; and

(2) Clearly specify all requirements which offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(e) Affirmative steps should be taken to assure that small, minority, and women businesses are utilized when possible as sources of supplies, equipment, construction and services.

(f) Contract pricing. Cost plus a percentage of cost method of contracting shall not be used.

(g) Unacceptable bidders. The following will not be allowed to bid on, or negotiate for, a contract or subcontract related to the construction of the project:

- (1) An engineer as an individual or firm who has prepared plans and specifications or who will be responsible for monitoring the construction;
- (2) Any firm or corporation in which the owner's engineer is an officer, employee, or holds or controls a substantial interest;
- (3) The governing body's officers, employees, or agents;
- (4) Any member of the immediate family or partners in the entities referred to in paragraphs (g)(1), (g)(2) or (g)(3) of this section; or
- (5) An organization which employs, or is about to employ, any person in the entities referred to in paragraphs (g)(1), (g)(2) or (g)(3), (g)(4) of this section.

(h) Contract award. Contracts shall be made only with responsible parties possessing the potential ability to perform successfully under the terms and conditions of a proposed procurement. Consideration shall include but not be limited to matters such as integrity, record of past performance, financial and technical resources, and accessibility to other necessary resources. Contracts shall not be made with parties who are suspended or debarred by any Agency of the United States Government.

§1780.71 [Reserved]

§1780.72 Procurement methods.

Procurement shall be made by one of the following methods: Small purchase procedures; competitive sealed bids (formal advertising); competitive negotiation; or noncompetitive negotiation. Competitive sealed bids (formal advertising) is the preferred procurement method for construction contracts.

(a) Small purchase procedures. Small purchase procedures are those relatively simple and informal procurement methods that are sound and appropriate for a procurement of services, supplies or other property, costing in the aggregate not more than \$100,000. If small purchase procedures are used for a procurement, written price or rate quotations shall be requested from at least three qualified sources.

(b) Competitive sealed bids. In competitive sealed bids (formal advertising), an invitation for sealed bids is publicly advertised and a firm-fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is lowest, price and other factors considered. When using this method the following shall apply:

- (1) The invitation for bids shall be publicly advertised at a sufficient time prior to the date set for opening of bids. The invitation shall comply with the requirements in §1780.70(d). Bids shall be solicited from an adequate number of qualified sources;
- (2) All bids shall be opened publicly at the time and place stated in the invitation for bids;
- (3) A firm-fixed-price contract award shall be made by written notice to that responsible bidder whose bid, conforming to the invitation for bids, is lowest. When specified in the bidding documents, factors such as discounts and transportation costs shall be considered in determining which bid is lowest; and
- (4) Any or all bids may be rejected by the owner when it is in its best interest.

(c) Competitive negotiation. In competitive negotiations, proposals are requested from a number of sources and the Request for Proposal is publicized. Negotiations are normally conducted with more than one of the sources submitting offers. Competitive negotiation may be used if conditions are not appropriate for the use of formal advertising and where discussions and bargaining with a view to reaching agreement on the technical quality, price, other terms of the proposed contract and specifications may be necessary. If competitive negotiation is used for a procurement, the following requirements shall apply:

- (1) Proposals shall be solicited from an adequate number of qualified sources to permit reasonable competition consistent with the nature and requirements of the Procurement. The Request for Proposal shall be publicized and reasonable requests by other sources to compete shall be honored to the maximum extent practicable;
- (2) The Request for Proposal shall identify all significant evaluation factors and their relative importance;
- (3) The owner shall provide mechanisms for technical evaluation of the proposals received, determination of responsible offerors for the purpose of written or oral discussions, and selection for contract award; and
- (4) Award may be made to the responsible offeror whose proposal will be most advantageous to the owner. Unsuccessful offerors should be promptly notified.

(d) Noncompetitive negotiation. Noncompetitive negotiation is procurement through solicitation of a proposal from only one source, or after solicitation of a number of sources, competition is determined inadequate. Noncompetitive negotiation may be used when the award of a contract is not feasible under small purchase or competitive sealed bids. Circumstances under which a contract may be awarded by noncompetitive negotiations are limited to the following:

- (1) The item is available only from a single source; or
- (2) There exists a public exigency or emergency and the urgency for the requirement will not permit a delay incident to competitive solicitation; or
- (3) After solicitation of a number of sources, competition is determined inadequate; or
- (4) No acceptable bids have been received after formal advertising; or
- (5) The procurement is for professional services; or
- (6) The aggregate amount does not exceed \$100,000.

§1780.73 [Reserved]

§1780.74 Contracts awarded prior to applications.

Owners awarding construction or other procurement contracts prior to filing an application, must provide evidence that is satisfactory to the Agency that the contract was entered into without intent to circumvent the requirements of Agency regulations.

(a) Modifications. The contract shall be modified to conform with the provisions of this part. Where this is not possible, modifications will be made to the extent practicable and, as a minimum, the contract must comply with all State and local laws and regulations as well as statutory requirements and executive orders related to the Agency financing. When all construction is complete and it is impracticable to modify the contracts, the owner must provide the certification required by paragraph (c) of this section.

(b) Consultant's certification. Provide a certification by an engineer, licensed in the State where the facility is constructed, that any construction performed complies fully with the plans and specifications.

(c) Owner's certification. Provide a certification by the owner that the contractor has complied with applicable statutory and executive requirements related to Agency financing for construction already performed.

§1780.75 Contract provisions.

In addition to provisions required for a valid and legally binding contract, any recipient of Agency funds shall include the following contract provisions in all contracts.

- (a) Remedies. Contracts other than small purchases shall contain provisions or conditions which will allow for administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. A realistic liquidated damage provision should be included in all contracts for construction.
- (b) Termination. All contracts exceeding \$10,000, shall contain suitable provisions for termination by the owner including the manner by which it will be effected and the basis for settlement. In addition, such contracts shall describe conditions under which the contract may be terminated for default as well as conditions where the contract may be terminated because of circumstances beyond the control of the contractor.
- (c) Surety. In all contracts for construction or facility improvements exceeding \$100,000, the owner shall require bonds or cash deposit in escrow assuring performance and payment each in the amount of 100 percent of the contract cost. The surety will be in the form of performance bonds and payment bonds. For contracts of lesser amounts, the owner may require surety. When a surety is not provided, contractors will furnish evidence of payment in full for all materials, labor, and any other items procured under the contract. Form RD 1924-10, "Release by Claimants," and Form RD 1924-9, "Certificate of Contractor's Release," may be used for this purpose. Companies providing performance bonds and payment bonds must hold a certificate of authority as an acceptable surety on Federal bonds as listed in Treasury Circular 570 as amended and the surety must be listed as having a license to do business in the State where the facility is located.
- (d) Equal employment opportunity. All contracts awarded in excess of \$10,000 by owners shall contain a provision requiring compliance with Executive Order 11246 (3 CFR, 1966 Comp., p. 339), entitled, "Equal Employment Opportunity," as amended by Executive Order 11375 (3 CFR, 1968 Comp., p. 321, and as supplemented by Department of Labor regulations 41 CFR chapter 60.
- (e) Anti-kickback. All contracts for construction shall include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874). This Act provides that each contractor shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which they are otherwise entitled. The owner shall report suspected or reported violations to the Agency.
- (f) Records. All negotiated contracts (except those of \$10,000 or less) awarded by owners shall include a provision to the effect that the owner, the Agency, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the contractor which are directly pertinent to a specific Federal loan or grant program for the purpose of making audits, examinations, excerpts, and transcriptions. Owners shall require contractors to maintain all required records for 3 years after making final payment and all other pending matters are closed.

(g) State Energy Conservation Plan. Contracts shall incorporate mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201).

(h) Change orders. The construction contract shall require that all contract change orders be concurred in by the Agency.

(i) Agency concurrence. All contracts must contain a provision that they shall not be effective unless and until the State program official or designee concurs in writing.

(j) Retainage. All construction contracts shall contain adequate provisions for retainage. No payments will be made that would deplete the retainage nor place in escrow any funds that are required for retainage nor invest the retainage for the benefit of the contractor. The retainage shall not be less than an amount equal to 5 percent of an approved partial payment estimate until the project is substantially complete and accepted by the owner, consulting engineer and Agency. The contract must provide that additional amounts may be retained if the job is not proceeding satisfactorily.

(k) Other compliance requirements. Contracts in excess of \$100,000 shall contain a provision which requires compliance with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857(h)), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738 (3 CFR, 1974 Comp., p. 209), and Environmental Protection Agency (EPA) regulations 40 CFR Part 15, which prohibit the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities. The provision shall require reporting of violations to the Agency and to the U.S. Environmental Protection Agency, Assistant Administrator for Enforcement. Solicitations and contract provisions shall include the requirements of 4 CFR 15.4 (c) as set forth in RUS Bulletin 1780-14.

#### §1780.76 Contract administration.

Owners shall be responsible for maintaining a contract administration system to monitor the contractors' performance and compliance with the terms, conditions, and specifications of the contracts.

(a) Preconstruction conference. Prior to beginning construction, the owner will schedule a preconstruction conference where the consulting engineer will review the planned development with the Agency, owner, resident inspector, attorney, contractor, and other interested parties. The conference will thoroughly cover applicable items included in Form RD 1924-16, "Record of Pre-construction Conference," and the discussions and agreements will be documented.

(b) Monitoring reports. The owner is required to monitor construction and provide a report to the Agency giving a full explanation under the following circumstances:

- (1) Reasons why approved construction schedules were not met;
- (2) Analysis and explanation of cost overruns and how payment is to be made for the same; and
- (3) If events occur which have a significant impact upon the project.



(c) Inspection. Full-time resident inspection is required for all construction unless a written exception is made by the Agency upon written request of the owner. Unless otherwise agreed, the resident inspector will be provided by the consulting engineer. Prior to the preconstruction conference, the consulting engineer will submit a resume of qualifications of the resident inspector to the owner and to the Agency for acceptance in writing. If the owner provides the resident inspector, it must submit a resume of the inspector's qualifications to the project engineer for comments and the Agency for acceptance in writing prior to the preconstruction conference. The resident inspector will work under the technical supervision of the project engineer and the role and responsibilities will be defined in writing.

(d) Inspector's daily diary. The resident inspector will maintain a record of the daily construction progress in the form of a daily diary and daily inspection reports. The daily entries shall be made available to the Agency personnel and will be reviewed during project inspections. The original complete set will be furnished to the owner upon completion of construction. RUS Bulletin 1780-18 is available from the Agency for preparing daily inspection reports or the reports can be provided in other formats approved by the State staff engineer.

(e) Payment for Construction. EJCDC E-620 "Contractor's Application for Payment" shall be used for construction payments. If EJCDC E-620 is not used, prior concurrence by the State staff engineer must be obtained.

(1) Payment of contract retainage will not be made until such retainage is due and payable under the terms of the contract.

(2) Invoices for the payment of construction costs must be approved by the owner, project engineer and concurred in by the Agency.

(3) The review and acceptance of project costs, including construction payment estimates by the Agency shall not attest to the correctness of the amounts, the quantities shown, or that the work has been performed under the terms of agreements or contracts.

(f) Prefinal inspections. A prefinal inspection will be made by the owner, resident inspector, project engineer, contractor, representatives of other agencies involved, and Agency representative (preferably the State staff engineer or designee). The inspection results will be recorded by the project engineer and a copy provided to all interested parties.

(g) Final inspection. A final inspection will be made by the Agency before final payment is made.

(h) Changes in development plans.

(1) Changes in development plans shall be reviewed and approved by the Agency provided:

- (i) Funds are available to cover any additional costs; and
- (ii) The change is for an authorized loan or grant purpose; and
- (iii) It will not adversely affect the soundness of the facility operation or the Agency's security; and
- (iv) The change is within the scope of the contract,

(2) Changes will be recorded on EJCDC C-941 "Change Order", unless use of a similar form is approved by the State program official or designee. Regardless of the form, change orders must be approved by the State program official or designee.

(3) Changes should be accomplished only after Agency approval and shall be authorized only by means of contract change order. The change order will include items such as:

- (i) Any changes in labor and material;
- (ii) Changes in facility design;
- (iii) Any decrease or increase in quantities based on final measurements that are different from those shown in the bidding schedule; and
- (iv) Any increase or decrease in the time to complete the project.

(4) All changes shall be recorded on chronologically numbered contract change orders as they occur. Change orders will not be included in payment estimates until approved by all parties.

§§1780.77 - 1780.79 [Reserved]

# **SECTION 3.0**

## **PER Guides**

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UNITED STATES DEPARTMENT OF AGRICULTURE  
Rural Utilities Service

**BULLETIN 1780-2**

**SUBJECT:** Preliminary Engineering Report – Water Facilities

**TO:** Rural Development State Directors, RUS Program Directors, State Engineers

**EFFECTIVE DATE:** Date of approval.

**OFFICE OF PRIMARY INTEREST:** Environmental and Engineering Staff, Water and Environmental Programs

**INSTRUCTIONS:** This bulletin replaces previous RUS Bulletin 1780-2.

**AVAILABILITY:** This bulletin is available on the Rural Utilities Services' website at [www.usda.gov/rus/water](http://www.usda.gov/rus/water).

**PURPOSE:** This Bulletin provides applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report for a water system application.



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GARY J. MORGAN  
Assistant Administrator  
Water and Environmental Programs

*September 10, 2003*

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Date

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### **INDEX:**

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Preliminary Engineering Report  
Project Planning  
Water Facility

## **ABBREVIATIONS**

O&M – Operations and Maintenance  
PER – Performance Engineering Report  
RUS – Rural Utilities Service

## 1 GENERAL

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects", and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed water systems.

## 2 PROJECT PLANNING AREA

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

- a Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.
- b Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains, including stream crossings), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.
- c Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period (typically 20-years). These projections should be based on historical records with justification from recognized sources.

### 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

- a Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).
- b History. Provide a brief description of when major system components were constructed or renovated.
- c Condition of Facilities. Describe present condition; suitability for continued use; adequacy of water supply; and, the treatment, storage, and distribution capabilities of any existing central facilities. Note the quantity of unaccounted for water. Also, describe compliance with Safe Drinking Water Act and applicable State requirements.
- d Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

- a Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.
- b System O&M. Describe the concerns and indicate those with the greatest impact. Investigate water loss, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.
- c Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), interconnecting with other existing systems, and developing



centrally managed small cluster or individual facilities. These alternatives should be consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:

- a Description. Describe the facilities associated with the alternative. Describe all feasible water supply sources and provide comparison of such sources. Also, describe treatment, storage and distribution facilities.
- b Design Criteria. State the design parameters used for evaluation purposes. These parameters must comply with RUS design policies (7 CFR 1780.57) and state regulatory requirements.
- c Map. Schematic layout.
- d Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.
- e Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.
- f Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.
- g Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs:
  - (1) Construction.
  - (2) Non-Construction.
  - (3) Annual Operations and Maintenance.
- h Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

6 SELECTION OF AN ALTERNATIVE

- a Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The “real” federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today’s dollars) and the salvage value. A 20-year real interest rate may be interpolated as the average of the 10-year and 30-year rates on the web page at:  
[www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html).
- b A matrix rating system could be useful in displaying the information on each alternative.
- c Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

- a Project Design.
  - (1) Water Supply. Include requirements for quality and quantity. Describe recommended source, including site.
  - (2) Treatment. Describe process in detail and identify location of plant and site of any process discharges. Identify capacity of treatment plant (e.g. Maximum Daily Demand).
  - (3) Storage. Identify size, type and location.
  - (4) Pumping Stations. Identify size, type, location and any special power requirements.
  - (5) Distribution Layout. Identify general location of line improvements: lengths, sizes and key components.
- b Total Project Cost Estimate. Provide an itemized estimate of the project cost based on the stated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and

other costs associated with the proposed project. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system.)

- c Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.
- (1) Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, water treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget purposes, base water use on 60 gallons per capita per day, or 150 gallons per residential-sized connection per day, or 4,500 gallons per residential-sized connection per month. When large agricultural or commercial users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.
  - (2) Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, water purchase, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies, printing, and miscellaneous.
  - (3) Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.
  - (4) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:
    - Debt Service Reserve - Unless otherwise required by State statute, the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
    - Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual

reserve deposit to fund replacement of short-lived assets, such as pumps, paint, and small equipment. Short-lived assets include those items not covered under O&M, however, this does not include long-lived assets such as a water tank or treatment facility replacement that should be funded with long-term financing.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Rural Utilities Service

**BULLETIN 1780-3**

**SUBJECT:** Preliminary Engineering Report – Wastewater Facilities

**TO:** Rural Development State Directors, RUS Program Directors, State Engineers

**EFFECTIVE DATE:** Date of approval.

**OFFICE OF PRIMARY INTEREST:** Environmental and Engineering Staff, Water and Environmental Programs.

**INSTRUCTIONS:** This bulletin replaces previous RUS Bulletin 1780-3, Preliminary Engineering Report – Sewerage Systems.

**AVAILABILITY:** This bulletin is available on the Rural Utilities Services' website at [www.usda.gov/rus/water](http://www.usda.gov/rus/water).

**PURPOSE:** This Bulletin provides applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report for a wastewater system application.



GARY J. MORGAN  
Assistant Administrator  
Water and Environmental Programs

*October 2, 2003*

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Date

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### **INDEX:**

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Preliminary Engineering Report  
Project Planning  
Wastewater Facility

## **ABBREVIATIONS**

O&M – Operations and Maintenance  
PER – Preliminary Engineering Report  
RUS – Rural Utilities Service

1 GENERAL

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects", and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed wastewater systems.

2 PROJECT PLANNING AREA

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

- a Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.
- b Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains, including stream crossings), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.
- c Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period (typically 20-years). These projections should be based on historical records with justification from recognized sources.

### 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

- a Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).
- b History. Provide a brief description of when major system components were constructed or renovated.
- c Condition of Facilities. Describe present condition; suitability for continued use; adequacy of current facilities; and, if any existing central facilities, the treatment, storage, and disposal capabilities. Note the quantity of inflow and infiltration/exfiltration associated with the existing collection system. Also, describe compliance with Clean Water Act and applicable State requirements.
- d Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

- a Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.
- b System O&M. Describe the concerns and indicate those with the greatest impact. Investigate infiltration and inflow, management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.
- c Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), interconnecting with other existing systems, and developing centrally managed small cluster or individual facilities. These alternatives should be



consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:

- a Description. Describe the facilities associated with the alternative. Describe all feasible wastewater treatment technologies and provide comparison of such. Also, describe collection facilities. A feasible system may include a combination of centralized and decentralized (on-site or cluster) units.
- b Design Criteria. State the design parameters used for evaluation purposes. These parameters must comply with RUS design policies (7 CFR 1780.57) and state regulatory requirements.
- c Map. Schematic layout.
- d Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.
- e Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.
- f Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.
- g Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs:
  - (1) Construction.
  - (2) Non-Construction.
  - (3) Annual Operations and Maintenance.
- h Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

## 6 SELECTION OF AN ALTERNATIVE

- a Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be

completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The “real” federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today’s dollars) and the salvage value. This rate may be found at:

[www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html)

- b A matrix rating system could be useful in displaying the information on each alternative.
- c Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

## 7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

- a Project Design.
  - (1) Collection System Layout. Identify general location of line improvements: lengths, sizes, and key components.
  - (2) Pumping Stations. Identify size, type, site location, and any special power requirements.
  - (3) Treatment. Describe process in detail and identify location of any treatment units and site of any discharges.
- b Total Project Cost Estimate. Provide an itemized estimate of the project cost based on the stated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system.)
- c Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner’s accountant and other known technical service providers.
  - (1) Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, wastewater treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget

purposes, base residential wastewater generation on 60 gallons per capita per day, or 150 gallons per residential-sized connection per day, or 4,500 gallons per residential-sized connection per month. Higher per person or per EDU flows may be used with adequate justification. When large agricultural or commercial users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.

- (2) Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, water purchase, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies and printing , and miscellaneous.
- (3) Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.
- (4) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:
  - Debt Service Reserve - Unless otherwise required by State statute the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
  - Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual reserve deposit recommended to fund replacement of short-lived assets. Examples of short-lived assets include pump/motor overhaul or replacement, painting, and small equipment replacement. Short-lived assets include those items not included under O&M, however, it should not include long-lived assets such as pump station or treatment facility replacement that should be funded with long-term financing.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlight the need for special coordination, a recommended plan of action to expedite project development, etc.

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UNITED STATES DEPARTMENT OF AGRICULTURE  
Rural Utilities Service

**BULLETIN 1780-4**

**SUBJECT:** Preliminary Engineering Report – Solid Waste Management Facilities

**TO:** Rural Development State Directors, RUS Program Directors, State Engineers

**EFFECTIVE DATE:** Date of approval.

**OFFICE OF PRIMARY INTEREST:** Environmental and Engineering Staff, Water and Environmental Programs.

**INSTRUCTIONS:** This bulletin replaces previous RUS Bulletin 1780-4, Preliminary Engineering Report – Solid Waste Disposal Systems.

**AVAILABILITY:** This bulletin is available on the Rural Utilities Services' website at <http://www.usda.gov/rus/water/index.htm>.

**PURPOSE:** This Bulletin provides applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report for a solid waste management system application.



GARY J. MORGAN  
Assistant Administrator  
Water and Environmental Programs

*October 2, 2003*

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Date

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Preliminary Engineering Report  
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Solid Waste Management Facility

## ABBREVIATIONS

O&M – Operations and Maintenance  
PER – Preliminary Engineering Report  
RUS – Rural Utilities Service

## 1 GENERAL

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action, from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, "Guide for Preparing the Environmental Report for Water and Waste Projects", guidance in RUS Bulletin 1794A-602, and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed solid waste disposal facilities.

## 2 PROJECT PLANNING AREA

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. Service may be provided by a combination of central, cluster, or individual facilities. The description should include information on the following:

- a Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.
- b Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.
- c Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period (typically 20-years). These projections should be based on historical records with justification from recognized sources.

## 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

- a Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).
- b History. Provide a brief description of when major system components were constructed or renovated.
- c Condition of Facilities. Describe present condition; suitability for continued use; adequacy of current facilities; and the collection, storage, processing, and disposal capabilities of any existing facilities. Also, describe compliance with Resource Conservation and Recovery Act and other applicable Federal and State requirements.
- d Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.

#### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

- a Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.
- b System O&M. Describe the concerns and indicate those with the greatest impact. Investigate management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.
- c Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

#### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), contracting with other existing facilities, and developing centrally managed small cluster or individual facilities. These alternatives should be consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:



- a Description. Describe the facilities associated with the alternative. Describe all feasible solid waste treatment technologies and provide comparison of such. Also, describe collection, storage, processing space, and disposal facilities. A feasible system may include a combination of centralized and decentralized (on-site or cluster) facilities.
- b Design Criteria. State the design parameters used for evaluation purposes. These parameters must comply with RUS design policies (7 CFR 1780.57) as well as other federal and state regulatory requirements.
- c Map. Schematic layout.
- d Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.
- e Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.
- f Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.
- g Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs:
  - (1) Construction.
  - (2) Non-Construction.
  - (3) Annual Operations and Maintenance.
- h Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

## 6 SELECTION OF AN ALTERNATIVE

- a Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The “real” federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today’s dollars) and the salvage value. This rate may be found at:  
[www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html).

- b A matrix rating system could be useful in displaying the information on each alternative.
- c Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

## 7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

- a Project Design.
  - (1) Collection. Describe process in detail and identify quantities of material (in both volume and weight), length of transport, location and type of transfer facilities, and any special handling requirements.
  - (2) Storage. If any, describe capacity, type, and site location.
  - (3) Processing. If any, describe capacity, type, and site location.
  - (4) Disposal. Describe process in detail and identify permit requirements, quantities of material, recycling processes, location of plant, and site of any process discharges.
- b Total Project Cost Estimate. Provide an itemized estimate of the project cost based on the stated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering. (For projects containing both water and waste disposal systems, provide a separate cost estimate for each system).
- c Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the facility. The engineer will incorporate information from the owner's accountant and other known technical service providers.
  - (1) Income. Provide a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, disposal contracts, and other sources of income. When large-scale users are projected, the report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.
  - (2) Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing facilities and projected costs for operating

the facilities as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies and printing, and miscellaneous.

- (3) Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.
- (4) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:
  - Debt Service Reserve - Unless otherwise required by State statute the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
  - Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual reserve deposit recommended to fund replacement of short-lived assets.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlighting of the need for special coordination, a recommended plan of action to expedite project development, etc.

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UNITED STATES DEPARTMENT OF AGRICULTURE  
Rural Utilities Service

**BULLETIN 1780-5**

**SUBJECT:** Preliminary Engineering Report – Storm Water Facilities

**TO:** Rural Development State Directors, RUS Program Directors, State Engineers

**EFFECTIVE DATE:** Date of approval.

**OFFICE OF PRIMARY INTEREST:** Environmental and Engineering Staff, Water and Environmental Programs.

**INSTRUCTIONS:** This bulletin replaces previous RUS Bulletin 1780-5, Preliminary Engineering Report – Storm Waste-Water Disposal

**AVAILABILITY:** This bulletin is available on the Rural Utilities Services' website at [www.usda.gov/rus/water](http://www.usda.gov/rus/water).

**PURPOSE:** This Bulletin provides applicants and their consultants with instructions on how to prepare a Preliminary Engineering Report for Storm Water Management Facilities.



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GARY J. MORGAN  
Assistant Administrator  
Water and Environmental Programs

*October 2, 2003*

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Date

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Application Document  
Preliminary Engineering Report  
Project Planning  
Storm Water Facility

## ABBREVIATIONS

O&M – Operations and Maintenance  
PER – Preliminary Engineering Report  
RUS – Rural Utilities Service

## 1 GENERAL

A Preliminary Engineering Report (PER) should clearly describe the owner's present situation, analyze alternatives, and propose a specific course of action, from an engineering perspective. The level of effort required to prepare the report and the depth of analysis within the report are proportional to the size and complexity of the proposed project. Rural Utilities Service (RUS) projects must be modest in design, size and cost, and be constructed and operated in an environmentally responsible manner. Pursuant to 7 CFR Part 1794, guidance in RUS Bulletin 1794A-602, "Guide for Preparing the Environmental Report for Water and Waste Projects", and the Agency's environmental State Supplement, the applicant shall perform the environmental review concurrently with the project engineering planning. This document must indicate that environmental issues were considered as part of the engineering planning. Information provided in the PER will be used to process the funding request, therefore completeness and accuracy are essential for timely processing of the application. Other outlines may be utilized, but the essential information must be readily identifiable. Contact the Rural Development office for further guidance. The following should be used as a guide for the preparation of PERs for RUS financed storm water management systems.

## 2 PROJECT PLANNING AREA

Describe the area under consideration. The project planning area may be larger than the service area determined to be economically feasible. The description should include information on the following:

- a Location. Maps, photographs, and sketches. These materials should indicate legal and natural boundaries, major obstacles, elevations, etc.
- b Environmental Resources Present. Maps, photographs, studies and narrative. This section should provide information on the location and significance of important land resources (farmland, rangeland, forestland, wetlands and 100/500 year floodplains), historic sites, endangered species/critical habitats, etc., that were identified in the applicant's environmental information (normally an Environmental Report) and that must be considered in project planning. A narrative summary with reference to the applicant's environmental submittal is adequate.
- c Growth Areas and Population Trends. Specific areas of concentrated growth should be identified. Population projections for the project planning area and concentrated growth areas should be provided for the project design period (typically 20-years). These projections should be based on historical records with justification from recognized sources.

## 3 EXISTING FACILITIES

Describe the existing facilities including at least the following information:

- a Location Map. Provide a schematic layout and general service area map (may be identified on project planning area maps).
- b History. Provide a brief description of when major system components were constructed or renovated.
- c Condition of Facilities. Describe present condition; suitability for continued use; adequacy of current facilities; and the treatment, storage, and disposal capabilities of any existing facilities. Also, describe compliance with Clean Water Act and any other applicable Federal and State requirements.
- d Financial Status of any Existing Facilities. (Note: Owner will be submitting most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual operations and maintenance (O&M) cost, other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and any required reserve accounts.

#### 4 NEED FOR PROJECT

Describe the needs in the following order of priority:

- a Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to Federal, and State regulatory agencies.
- b System O&M. Describe the concerns and indicate those with the greatest impact. Investigate existing infrastructure problems such as treatment or storage needs or combined sewers. Consider management adequacy, inefficient designs, and problem elimination prior to adding additional capacity.
- c Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

#### 5 ALTERNATIVES CONSIDERED

This section should contain a description of the reasonable alternatives that were considered in planning a solution to meet the identified need. Documentation of alternatives considered is often a PER weakness. The following alternatives should be considered, if practicable: (1) building new facilities or (2) optimizing the current facilities (no construction). These alternatives should be consistent with those considered in the environmental review. Mitigation measures necessary to avoid or minimize any adverse environmental effects must be integrated into project design. The description should include the following information on each alternative:



- a Description. Describe the facilities associated with the alternative. Describe all feasible storm water treatment technologies and provide a comparison of them. Also, describe collection and storage facilities.
- b Design Criteria. State the design parameters used for evaluation purposes. These parameters must comply with RUS design policies (7 CFR 1780.57) and state regulatory requirements.
- c Map. Schematic layout.
- d Environmental Impacts. Do not duplicate the information in the applicant's submittal of environmental information. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to a specific alternative. RUS must conduct an environmental assessment prior to project approval.
- e Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, or leased.
- f Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, or other conditions which may affect cost of construction or operation of facility.
- g Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs:
  - (1) Construction.
  - (2) Non-Construction.
  - (3) Annual Operations and Maintenance.
- h Advantages/Disadvantages. Describe how the specific alternative meets the owner's needs with respect to financial, managerial, and operational resources. Explain how the proposal complies with regulatory requirements and existing comprehensive area-wide development plans. Explain how the proposal satisfies public and environmental concerns.

## 6 SELECTION OF AN ALTERNATIVE

- a Present Worth (life cycle) cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the feasible alternatives. All of the items from the cost estimate should be included in the analysis. The “real” federal discount rate from Appendix C of OMB Circular A-94 should be used for determining the present worth of the uniform series of O & M values (in today’s dollars) and the salvage value. This rate may be found at:  
[www.whitehouse.gov/omb/circulars/a094/a94\\_appx-c.html](http://www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html).

- b A matrix rating system could be useful in displaying the information on each alternative.
- c Note that if the range of present worth values is small, then non-monetary factors should be considered in determining which alternative should be selected.

## 7 PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. At least the following information should be included:

- a Project Design.
  - (1) Collection System Layout. Identify general location of line improvements: lengths, sizes, and key components.
  - (2) Pumping Stations. Identify size, type, location, and any special power requirements.
  - (3) Treatment. Describe treatment process in detail. Identify location of treatment facilities and process discharges. Capacity of treatment process should also be addressed.
  - (4) Storage. Identify size, type, and location.
  - (5) Disposal. Describe type of disposal facilities and location.
- b Total Project Cost Estimate. Provide an itemized estimate of the project cost based on the stated period of construction. Include development and construction, land and rights, legal, engineering, interest, equipment, contingencies, refinancing, and other costs associated with the proposed project. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering. (For projects containing both wastewater and storm water, such as combined sewer separation, provide a separate cost estimate for each system).
- c Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that provide assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.
  - (1) Income. Income sources may vary depending on how the storm water utility is managed. Project income realistically.
  - (2) Operations and Maintenance (O&M) Costs. Project costs realistically. Provide actual costs for existing systems and projected costs for operating the system as improved. In the absence of other reliable data, base on

actual costs of other existing facilities of similar size and complexity. Include facts in the report to substantiate operation and maintenance cost estimates. Include salaries, benefits, taxes, accounting and auditing fees, legal fees, interest, utilities, oil and fuel, insurance, annual repairs and maintenance, supplies, chemicals, office supplies, printing, and miscellaneous.

- (3) Debt repayments. Describe existing and proposed financing from all sources. All estimates of RUS funding should be based on loans, not grants. RUS will evaluate the proposed project for the possible inclusion of RUS grant funds.
- (4) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:
  - Debt Service Reserve - Unless otherwise required by State statute the debt service reserve should be established at one-tenth (1/10) of annual debt repayment requirement (amount of debt that must be repaid to government in a given fiscal year).
  - Short-Lived Asset Reserve - Additional reserve amounts may be needed to provide for timely replacement of short-lived assets. Prepare a schedule of short-lived assets and a recommended annual reserve deposit recommended to fund replacement of short-lived assets. Examples of short-lived assets include pump/motor overhaul or replacement, and small equipment replacement. Short-lived assets include those items not included under O&M, however, it should not include long-lived assets, such as storm sewer replacement, that should be funded with long-term financing.

## 8 CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlighting of the need for special coordination, a recommended plan of action to expedite project development, etc.

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# **SECTION 4.0**

## **Engineering Agreement Documents**

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## Owner-Engineer Agreement Document List

The Rural Utilities Service (RUS) and the Engineers Joint Contract Documents Committee (EJCDC) have developed a Funding Agency Edition of the Owner-Engineer Agreement that when properly assembled is acceptable for use on water and waste projects funded by RUS. These documents are 2002 edition and should be used in coordination with the EJCDC construction related documents, Funding Agency Editions. The Exhibits referenced here were specifically drafted to be used with the Owner-Engineer Agreement, Funding Agency Edition and should not be mixed with Exhibits from the Standard Edition.

Because the EJCDC documents are fully integrated, when making a modification in one document you should ensure that appropriate modifications are made in all effected documents. It is RUS policy that the applicants use the EJCDC documents with minimal modification. However, RUS recognizes each project is unique and that modifications may be required to satisfy project requirements or State statutes.

For a Project that will not be clearly defined until the Preliminary Engineering Report (PER) is approved and fees for basic services are to be either a lump sum or hourly rates with a not to exceed limit, the Owner and Engineer may wait until the Project is defined in the approved PER to negotiate services and compensation for the Design and Construction Phases.

Before applicants or consultants proceed with the development of an agreement, they should contact the Rural Development State Office to verify they have the most current information specific to the type of project and State where the project is located.

**Idaho Rural Development no longer publishes fee tables. Engineering fees must be reasonable. The fee for basic services may be a percentage of construction cost, lump sum or standard hourly rate method with a not to exceed amount. If lump sum is used, Rural Development will not approve changes involving increased fees for items within the scope of the project simply because the engineer's project budget is exceeded. Engineers lump sum bid shall cover the work specified and should anticipate unforeseen tasks. If tasks outside the scope of the project become necessary, then an addition may be considered. Conversely, if the scope of the project is reduced, a reduction in basic fee shall be made. A draft engineer-owner agreement must be sent to Rural Development for review prior to the owner or engineer signing the document.**

This table provides a list of the component parts of a complete Owner-Engineer Agreement and RUS Notes on their use. **Documents listed under the "Use Form" column must be used to develop the contract documents, unless a formal request is made by the Engineer and approved by Rural Development.**

| EJCDC Title   | Use Form            | RUS Notes: Necessary actions, important points   |
|---|---------------------|--|
| Standard Form of Agreement Between Owner and Engineer for Professional Services<br>Funding Agency Edition | EJCDC E-510<br>(02) | <ul style="list-style-type: none"><li>• Before an "Effective Date" is entered the Owner should consult with a Rural Development representative regarding funding requirements, appropriate services, and reasonable fees.</li><li>• Insert Rural Utilities Service and names of other Federal or State funding agencies that will be concurring in the Agreement.</li><li>• 4.01, If the Owner has specific invoicing requirements, those requirements should be outlined in Exhibit I, Special Provisions, as an amendment to this paragraph.</li><li>• 8.02, This Agreement constitutes the entire agreement between Owner and Engineer for the Project. No agreements for additional compensation for services provided under this Agreement are permitted.</li><li>• 8.04, Any additional Federal funding agency requirements should be outlined in Exhibit I, Special Provisions, as a supplement to this paragraph.</li><li>• 8.05, State funding agency requirements not in conflict with Federal requirements should be outlined in Exhibit I, Special</li></ul> |

| EJCDC Title   | Use Form   | RUS Notes: Necessary actions, important points  |
|---|--|---|
| Engineer's Services   | EJCDC E-510 Exhibit A (Required)   | <p>Provisions, as a new paragraph 8.05.</p> <ul style="list-style-type: none"> <li>• RUS funding can be used for payment of engineering services only after RUS has concurred in the agreement.</li> <li>• In addition to copies customarily provided for Owner, Engineer, and others, two executed copies with all Exhibits will be provided for Rural Development use.</li> <li>• A1.01.A.4, Insert number of alternatives or list of alternatives to be evaluated, but leave option to add any required by funding agencies.</li> <li>• A1.01.A.6, Typical tasks and deliverables are listed, but list should be reviewed and adjusted as appropriate.</li> <li>• A1.02.A.4, A1.03.A.4, A1.04.A.6, A1.05.A.19, and A1.06.A.5, Any unique tasks or deliverables not covered in the standard language must be added in the appropriate phase.</li> <li>• A1.06.B, The Engineer should provide a number of hours commensurate with the size and complexity of the project.</li> </ul>   |
| Owner's Responsibilities                                    | EJCDC E-510 Exhibit B (Required)   | <ul style="list-style-type: none"> <li>• Any of the listed responsibilities that have been moved to Exhibit A or are included in Additional Engineer's Services should be deleted here.</li> <li>• B2.01.R, Any unique tasks or deliverables not covered in the standard language must be added.</li> </ul>   |
| Payments to Engineer for Services and Reimbursable Expenses | EJCDC E-510 Exhibit C (Must Select One Option)   | <ul style="list-style-type: none"> <li>• Rural Development State Staff, in consultation with an ad hoc coordination group of professional engineers familiar with RUS funded water and waste projects, may modify Exhibit C and appendixes to be consistent with state requirements and local practices that do not conflict with Federal requirements.</li> <li>• Compensation Decision Guide, The Owner and Engineer have several methods of compensation available. The choice of the method of compensation determines which Exhibit C Sheets must be part of the Agreement. Although no specific format is provided, the Owner and Engineer may negotiate a Lump Sum method of compensation for well defined tasks under Additional Services.</li> <li>• All Sheets, Each sheet requires items to be entered to make the document complete. The estimates of total compensation associated with Standard Hourly Rates method of compensation are required for project budgeting.</li> <li>• Sheet C-8, Reimbursable expenses are included in the amount stated in C2.04.A.1.</li> <li>• Be specific about fees for providing PER and Environmental Report.</li> <li>• The Owner and Engineer may wait until the Project is defined in the approved PER to negotiate services and compensation for the Design and Construction Phases.</li> <li>• Be specific about fees regarding bidding and advertising multiple construction contracts and change order adjustments of contract amount and time.</li> </ul> |
| Reimbursable Expenses Schedule                              | EJCDC E-510 Exhibit C, Appendix 1 (Required when any reimbursable expenses are not part of basic fees) | <ul style="list-style-type: none"> <li>• This suggested format will normally be replaced by the Engineer's standard schedule.</li> <li>• Note that agreement provides for rates to be adjusted annually. Budget for expenses at time of service. Revised rates should be submitted to State Engineer for approval prior to implementation.</li> </ul>   |



| EJCDC Title   | Use Form   | RUS Notes: Necessary actions, important points   |
|---|--|--|
| Standard Hourly Rates Schedule  | EJCDC E-510 Exhibit C, Appendix 2 (Required when any Standard Hourly Rates method of compensation is selected) | <ul style="list-style-type: none"> <li>This suggested format will normally be replaced by the Engineer's standard schedule.</li> <li>Note that agreement provides for rates to be adjusted annually. Budget for expenses at time of service. Revised rates should be submitted to State Engineer for approval prior to implementation.</li> </ul>  |
| Duties, Responsibilities, and Limitations of Authority of Resident Project Representative | EJCDC E-510 Exhibit D (Required)   | <ul style="list-style-type: none"> <li>Required if Engineer provides this service</li> <li>A similar document outlining duties, responsibilities and limitations of authorities must be used if others provide service.</li> </ul>   |
| Notice of Acceptability of Work   | EJCDC E-510 Exhibit E (Required)   | <ul style="list-style-type: none"> <li>Executed copy will be provided to Rural Development at Project final inspection.</li> </ul>   |
| Construction Cost Limit   | EJCDC E-510 Exhibit F (Optional)   | <ul style="list-style-type: none"> <li>If Owner has strict budgetary limitations, this Exhibit assigns Engineer more responsibility for cost control.</li> </ul>   |
| Insurance   | EJCDC E-510 Exhibit G (Required)   | <ul style="list-style-type: none"> <li>The purpose of this Exhibit is two fold: a) disclosure of insurance coverage's by each party, and b) confirmation of each party's insurance requirements for this Agreement. Owner and Engineer are not required to carry each type of insurance listed.</li> <li>Owner should review and update insurance coverage where necessary to maintain adequate protection during construction period.</li> <li>Owner should consider requiring Engineer to carry comparable types of coverage and limits Owner is carrying.</li> <li>The default condition is that the contractor is required to provide "all risk" builders risk insurance coverage. If the Work is modifying existing facilities, the Owner may consider providing the property damage builders risk insurance. This requires a modification of General Conditions</li> </ul> |
| Dispute Resolution  | EJCDC E-510 Exhibit H (Optional)   | <ul style="list-style-type: none"> <li>Use only if it is desirable to settle disputes using a process other than the court system.</li> <li>Sample entries for blanks: <ul style="list-style-type: none"> <li>A. Name a specific mediator or mediation service/agency i.e. American Arbitration Association.</li> <li>B. Name a specific arbitration service/organization i.e. American Arbitration Association.</li> <li>B.1. Same as entry in B.</li> <li>B.2. Insert appropriate dollar amounts e.g. \$50,000.</li> </ul> </li> </ul>   |
| Special Provisions  | EJCDC E-510 Exhibit I (Optional)   | <ul style="list-style-type: none"> <li>Use only if specific modifications are required by State statute or unique project requirements.</li> <li>Follow document format.</li> </ul>  |
| Amendment to Owner-Engineer Agreement   | EJCDC E-510 Exhibit J (Required)   | <ul style="list-style-type: none"> <li>Exhibit J is not a critical part of the initial Agreement, but is the agreed format for amending the Agreement.</li> </ul>  |

**\*\*END\*\***

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This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

**STANDARD FORM OF AGREEMENT  
BETWEEN OWNER AND ENGINEER  
FOR  
PROFESSIONAL SERVICES  
FUNDING AGENCY EDITION**

*Prepared by*

**ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE**

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE  
*a practice division of the*  
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN CONSULTING ENGINEERS COUNCIL

AMERICAN SOCIETY OF CIVIL ENGINEERS

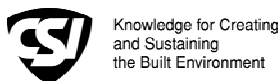
This document has been approved and endorsed by

The Associated General Contractors of America



and the

Construction Specification Institute



This document has been accepted by the  
United States Department of Agriculture  
Rural Utilities Services, Water and Waste Programs

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## ARTICLE 3 – SCHEDULE FOR RENDERING SERVICES

### 3.01 *Commencement*

- A. Engineer shall begin rendering services as of the Effective Date of the Agreement.

### 3.02 *Time for Completion*

- A. Engineer shall complete its obligations within a reasonable time. Specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided in Exhibit A, and are hereby agreed to be reasonable.
- B. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's services is impaired, or Engineer's services are delayed or suspended, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- C. If Owner authorizes changes in the scope, extent, or character of the Project, then the time for completion of Engineer's services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.
- D. Owner shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services.
- E. If Engineer fails, through its own fault, to complete the performance required in this Agreement within the time set forth, as duly adjusted, then Owner shall be entitled to the recovery of direct damages resulting from such failure.

## ARTICLE 4 – INVOICES AND PAYMENTS

### 4.01 *Invoices*

- A. *Preparation and Submittal of Invoices.* Engineer shall prepare invoices in accordance with its standard invoicing practices and the terms of Exhibit C, and in a manner acceptable to Owner. Engineer shall submit its invoices to Owner no more than once per month. Invoices are due and payable within 60 days of receipt.

### 4.02 *Payments*

- A. *Application to Interest and Principal.* Payment will be credited first to any interest owed to Engineer and then to principal.
- B. *Failure to Pay.* If Owner fails to make any payment due Engineer for services and expenses within 60 days after receipt of Engineer's invoice and funds are available for the Project, then:
  - 1. amounts due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said sixtieth day; and
  - 2. Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement until Owner has paid in full all amounts due for services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.
- C. *Disputed Invoices.* If Owner contests an invoice, Owner may withhold only that portion so contested, and must pay the undisputed portion.
- D. *Legislative Actions.* If after the Effective Date of the Agreement any governmental entity takes a legislative action that imposes taxes, fees, or charges on Engineer's services or compensation under this Agreement, then the Engineer may invoice such new taxes, fees, or charges as a Reimbursable Expense to which a factor of 1.0 shall be

applied. Owner shall pay such invoiced new taxes, fees, and charges; such payment shall be in addition to the compensation to which Engineer is entitled under the terms of Exhibit C.

## **ARTICLE 5 – OPINIONS OF COST**

### **5.01     *Opinions of Probable Construction Cost***

- A. Engineer's opinions of probable Construction Cost are to be made on the basis of Engineer's experience and qualifications and represent Engineer's best judgment as an experienced and qualified professional generally familiar with the construction industry. However, since Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner wishes greater assurance as to probable Construction Cost, Owner shall employ an independent cost estimator as provided in Exhibit B.

### **5.02     *Designing to Construction Cost Limit***

- A. If a Construction Cost limit is established between Owner and Engineer, such Construction Cost limit and a statement of Engineer's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F, "Construction Cost Limit," to this Agreement.

### **5.03     *Opinions of Total Project Costs***

- A. The services, if any, of Engineer with respect to Total Project Costs shall be limited to assisting the Owner in collating the various cost categories which comprise Total Project Costs. Engineer assumes no responsibility for the accuracy of any opinions of Total Project Costs.

## **ARTICLE 6 – GENERAL CONSIDERATIONS**

### **6.01     *Standards of Performance***

- A. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with Engineer's services.
- B. Owner shall not be responsible for discovering deficiencies in the technical accuracy of Engineer's services. Engineer shall correct any such deficiencies in technical accuracy without additional compensation except to the extent such corrective action is directly attributable to deficiencies in Owner-furnished information.
- C. Engineer may retain such Consultants as Engineer deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by Owner. The retention of such Consultants shall not reduce the Engineer's obligations to Owner under this Agreement.
- D. Subject to the standard of care set forth in Paragraph 6.01.A, Engineer and its Consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
- E. Engineer and Owner shall comply with applicable Laws and Regulations. Engineer shall comply with Owner-mandated standards that Owner has provided to Engineer in writing. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to Owner's responsibilities or to Engineer's scope of services, times of performance, and compensation.

- F. Engineer shall not be required to sign any documents, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. Owner agrees not to make resolution of any dispute with the Engineer or payment of any amount due to the Engineer in any way contingent upon the Engineer signing any such documents.
- G. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract, Funding Agency Edition" as prepared by the Engineers Joint Contract Documents Committee (No. C-710, 2002 Edition) unless both parties mutually agree to use other General Conditions by specific reference in Exhibit I.
- H. Engineer shall not at any time supervise, direct, or have control over Contractor's work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by Contractor, for security or safety at the Site, for safety precautions and programs incident to the Contractor's work in progress, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work.
- I. Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.
- J. Engineer shall not be responsible for the acts or omissions of any Contractor, subcontractor, or supplier, or of any of their agents or employees or of any other persons (except Engineer's own employees and its Consultants) at the Site or otherwise furnishing or performing any Work; or for any decision made on interpretations or clarifications of the Contract Documents given by Owner without consultation and advice of Engineer.
- K. All Contract Documents and Applications for Payment shall be subject to Agency concurrence.

#### 6.02 *Design without Construction Phase Services*

- A. If Engineer's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, then (1) Engineer's services under this Agreement shall be deemed complete no later than the end of the Bidding or Negotiating Phase; (2) Engineer shall have no design or shop drawing review obligations during construction; (3) Owner assumes all responsibility for the application and interpretation of the Contract Documents, contract administration, construction observation and review, and all other necessary Construction Phase engineering and professional services; and (4) Owner waives any claims against the Engineer that may be connected in any way thereto.

#### 6.03 *Use of Documents*

- A. All Documents are instruments of service in respect to this Project, and Engineer shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the Engineer) whether or not the Project is completed. Owner shall not rely in any way on any Document unless it is in printed form, signed or sealed by the Engineer or one of its Consultants.
- B. A party may rely that data or information set forth on paper (also known as hard copies) that the party receives from the other party by mail, hand delivery, or facsimile, are the items that the other party intended to send. Files in electronic media format of text, data, graphics, or other types that are furnished by one party to the other are furnished only for convenience, not reliance by the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- C. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any transmittal errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files.



- D. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the documents' creator.
- E. Owner may make and retain copies of Documents for information and reference in connection with use on the Project by Owner. Engineer grants Owner a license to use the Documents on the Project, extensions of the Project, and other projects of Owner, subject to the following limitations: (1) Owner acknowledges that such Documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project or on any other project without written verification or adaptation by Engineer; (2) any such use or reuse, or any modification of the Documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to Engineer's Consultants; (3) Owner shall indemnify and hold harmless Engineer and Engineer's Consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification without written verification, completion, or adaptation by Engineer; and (4) such limited license to Owner shall not create any rights in third parties.
- F. If Engineer at Owner's request verifies or adapts the Documents for extensions of the Project or for any other project, then Owner shall compensate Engineer at rates or in an amount to be agreed upon by Owner and Engineer.

#### 6.04 *Insurance*

- A. Engineer shall procure and maintain insurance as set forth in Exhibit G, "Insurance." Engineer shall cause Owner to be listed as an additional insured on any applicable general liability insurance policy carried by Engineer.
- B. Owner shall procure and maintain insurance as set forth in Exhibit G, "Insurance." Owner shall cause Engineer and Engineer's Consultants to be listed as additional insureds on any general liability or property insurance policies carried by Owner which are applicable to the Project.
- C. Owner shall require Contractor to purchase and maintain general liability and other insurance in accordance with the requirements of paragraph 5.04 of the "Standard General Conditions of the Construction Contract, Funding Agency Edition," (No. C-710, 2002 Edition) as prepared by the Engineers Joint Contract Documents Committee and to cause Engineer and Engineer's Consultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project.
- D. Owner and Engineer shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement.
- E. All policies of property insurance relating to the Project shall contain provisions to the effect that Engineer's and Engineer's Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against Engineer or its Consultants, or any insureds or additional insureds thereunder.
- F. At any time, Owner may request that Engineer or its Consultants, at Owner's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by Owner, and if commercially available, Engineer shall obtain and shall require its Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by Owner, and Exhibit G will be supplemented to incorporate these requirements.

#### 6.05 *Suspension and Termination*

##### A. *Suspension.*

1. By Owner: Owner may suspend the Project upon seven days written notice to Engineer.

2. By Engineer: If Engineer's services are substantially delayed through no fault of Engineer, Engineer may, after giving seven days written notice to Owner, suspend services under this Agreement.

B. *Termination.* The obligation to provide further services under this Agreement may be terminated:

1. For cause,

- a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
- b. By Engineer:
  - 1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or
  - 2) upon seven days written notice if the Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control.
  - 3) Engineer shall have no liability to Owner on account of such termination.
- c. Notwithstanding the foregoing, this Agreement will not terminate under paragraph 6.05.B.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. For convenience,

- a. By Owner effective upon Engineer's receipt of notice from Owner.

C. *Effective Date of Termination.* The terminating party under paragraph 6.05.B may set the effective date of termination at a time up to 30 days later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

D. *Payments Upon Termination.*

1. In the event of any termination under paragraph 6.05, Engineer will be entitled to invoice Owner and to receive payment for all acceptable services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination.
2. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to invoicing for those items identified in paragraph 6.05.D.1, to invoice Owner and to payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C.

E. *Delivery of Project Materials to Owner.* Prior to the effective date of termination, the Engineer will deliver to Owner copies of all completed Documents and other Project materials for which Owner has compensated Engineer. Owner's use of any such Documents or Project materials shall be subject to the terms of Paragraph 6.03.

6.06 *Controlling Law*

- A. This Agreement is to be governed by the law of the state in which the Project is located, its conflict of laws provisions excepted.

6.07 *Successors, Assigns, and Beneficiaries*

- A. Owner and Engineer each is hereby bound and the partners, successors, executors, administrators and legal representatives of Owner and Engineer (and to the extent permitted by paragraph 6.07.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise in this Agreement:
  - 1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.
  - 2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.
  - 3. Owner agrees that the substance of the provisions of this paragraph 6.07.C shall appear in the Contract Documents.

6.08 *Dispute Resolution*

- A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice prior to invoking the procedures of Exhibit H or other provisions of this Agreement, or exercising their rights under law.
- B. If the parties fail to resolve a dispute through negotiation under paragraph 6.08.A, then either or both may invoke the procedures of Exhibit H. If Exhibit H is not included, or if no dispute resolution method is specified in Exhibit H, then the parties may exercise their rights under law.

6.09 *Environmental Condition of Site*

- A. Owner has disclosed to Engineer in writing the existence of all known and suspected Asbestos, PCBs, Petroleum, Hazardous Waste, Radioactive Material, hazardous substances, and other Constituents of Concern located at or near the Site, including type, quantity, and location.
- B. Owner represents to Engineer that to the best of its knowledge no Constituents of Concern, other than those disclosed in writing to Engineer, exist at the Site.
- C. If Engineer encounters an undisclosed Constituent of Concern, then Engineer shall notify (1) Owner and (2) appropriate governmental officials if Engineer reasonably concludes that doing so is required by applicable Laws or Regulations.

- D. It is acknowledged by both parties that Engineer's scope of services does not include any services related to Constituents of Concern. If Engineer or any other party encounters an undisclosed Constituent of Concern, or if investigative or remedial action, or other professional services, are necessary with respect to disclosed or undisclosed Constituents of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until Owner: (1) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Constituents of Concern; and (2) warrants that the Site is in full compliance with applicable Laws and Regulations.
- E. If the presence at the Site of undisclosed Constituents of Concern adversely affects the performance of Engineer's services under this Agreement, then the Engineer shall have the option of (1) accepting an equitable adjustment in its compensation or in the time of completion, or both; or (2) terminating this Agreement for cause on 30 days notice.
- F. Owner acknowledges that Engineer is performing professional services for Owner and that Engineer is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, which are or may be encountered at or near the Site in connection with Engineer's activities under this Agreement.

#### 6.10 *Indemnification and Mutual Waiver*

- A. *Indemnification by Engineer.* To the fullest extent permitted by law, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, partners, agents, consultants, and employees from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Engineer or Engineer's officers, directors, partners, employees, or Consultants.
- B. *Indemnification by Owner.* To the fullest extent permitted by law, Owner shall indemnify and hold harmless Engineer, Engineer's officers, directors, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Owner or Owner's officers, directors, partners, agents, consultants, or employees, or others retained by or under contract to the Owner with respect to this Agreement or to the Project.
- C. *Environmental Indemnification.* In addition to the indemnity provided under paragraph 6.10.B of this Agreement, and to the fullest extent permitted by law, Owner shall indemnify and hold harmless Engineer and its officers, directors, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals, and all court, arbitration, or other dispute resolution costs) caused by, arising out of, relating to, or resulting from a Constituent of Concern at, on, or under the Site, provided that (1) any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (2) nothing in this paragraph shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct.
- D. *Percentage Share of Negligence.* To the fullest extent permitted by law, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damage caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual,

shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, and all other negligent entities and individuals.

- E. *Mutual Waiver.* To the fullest extent permitted by law, Owner and Engineer waive against each other, and the other's employees, officers, directors, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project.

#### 6.11 *Miscellaneous Provisions*

- A. *Notices.* Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by facsimile, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.
- B. *Survival.* All express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion or termination for any reason.
- C. *Severability.* Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Engineer, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- D. *Waiver.* A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.
- E. *Accrual of Claims.* To the fullest extent permitted by law, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of Substantial Completion.

### ARTICLE 7 – DEFINITIONS

#### 7.01 *Defined Terms*

- A. Wherever used in this Agreement (including the Exhibits hereto) terms (including the singular and plural forms) printed with initial capital letters have the meanings indicated in the text above or in the exhibits; in the following provisions; or in the "Standard General Conditions of the Construction Contract, Funding Agency Edition," prepared by the Engineers Joint Contract Documents Committee (No. C-710, 2002 Edition):
  - 1. *Additional Services* – The services to be performed for or furnished to Owner by Engineer in accordance with Exhibit A, Part 2, of this Agreement.
  - 2. *Agency* – The Federal or state agency named on page 1 of this Agreement.
  - 3. *Basic Services* – The services to be performed for or furnished to Owner by Engineer in accordance with Exhibit A, Part 1, of this Agreement.
  - 4. *Construction Cost* – The cost to Owner of those portions of the entire Project designed or specified by Engineer. Construction Cost does not include costs of services of Engineer or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or Owner's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to Owner pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.

5. *Constituent of Concern* – Any substance, product, waste, or other material of any nature whatsoever (including, but not limited to, Asbestos, Petroleum, Radioactive Material, and PCBs) which is or becomes listed, regulated, or addressed pursuant to [a] the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); [b] the Hazardous Materials Transportation Act, 49 U.S.C. §§1801 et seq.; [c] the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); [d] the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; [e] the Clean Water Act, 33 U.S.C. §§1251 et seq.; [f] the Clean Air Act, 42 U.S.C. §§7401 et seq.; and [g] any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
6. *Consultants* – Individuals or entities having a contract with Engineer to furnish services with respect to this Project as Engineer’s independent professional associates, consultants, subcontractors, or vendors.
7. *Documents* – Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by Engineer to Owner pursuant to this Agreement.
8. *Drawings* – That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings are not Drawings as so defined.
9. *Effective Date of the Agreement* – The date indicated in this Agreement on which it becomes effective. If no such date is indicated it means the date on which Agency concurs with the Agreement.
10. *Laws and Regulations; Laws or Regulations* – Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
11. *Reimbursable Expenses* – The expenses incurred directly by Engineer in connection with the performing or furnishing of Basic and Additional Services for the Project.
12. *Resident Project Representative* – The authorized representative of Engineer, if any, assigned to assist Engineer at the Site during the Construction Phase. The Resident Project Representative will be Engineer’s agent or employee and under Engineer’s supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by Owner. The duties and responsibilities of the Resident Project Representative, if any, are as set forth in Exhibit D.
13. *Specifications* – That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
14. *Total Project Costs* – The sum of the Construction Cost, allowances for contingencies, and the total costs of services of Engineer or other design professionals and consultants, together with such other Project-related costs that Owner furnishes for inclusion, including but not limited to cost of land, rights-of-way, compensation for damages to properties, Owner’s costs for legal, accounting, insurance counseling and auditing services, interest and financing charges incurred in connection with the Project, and the cost of other services to be provided by others to Owner pursuant to Exhibit B of this Agreement.


## ARTICLE 8 – EXHIBITS AND SPECIAL PROVISIONS

### 8.01 Exhibits Included

- A. Exhibit A, “Engineer’s Services,” consisting of \_\_\_\_ pages.
- B. Exhibit B, “Owner’s Responsibilities,” consisting of \_\_\_\_ pages.

- C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses," consisting of \_\_\_\_\_ pages.
- D. Exhibit D, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative," consisting of \_\_\_\_\_ pages.
- E. Exhibit E, "Notice of Acceptability of Work," consisting of \_\_\_\_\_ pages.
- F. Exhibit F, "Construction Cost Limit," consisting of \_\_\_\_\_ pages.
- G. Exhibit G, "Insurance," consisting of \_\_\_\_\_ pages.
- H. Exhibit H, "Dispute Resolution," consisting of \_\_\_\_\_ pages.
- I. Exhibit I, "Special Provisions," consisting of \_\_\_\_\_ pages.
- J. Exhibit J, "Amendment to Standard Form of Agreement," consisting of \_\_\_\_\_ pages.

#### 8.02 *Total Agreement*

- A. This Agreement (consisting of pages 1 to  inclusive, together with the exhibits identified above) constitutes the entire agreement between Owner and Engineer for the Project and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, or modified by a duly executed written instrument based on the format of Exhibit J to this Agreement.

#### 8.03 *Designated Representatives*

- A. With the execution of this Agreement, Engineer and Owner shall designate specific individuals to act as Engineer's and Owner's representatives with respect to the services to be performed or furnished by Engineer and responsibilities of Owner under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party.

#### 8.04 *Federal Requirements*

- A. *Agency Concurrence.* Signature of a duly authorized representative of Agency in the space provided on the signature page hereof does not constitute a commitment to provide financial assistance or payments hereunder but does signify that this Agreement conforms to Agency's applicable requirements
- B. *Audit and Access to Records.* For all negotiated contracts and negotiated modifications (except those of \$10,000 or less), Owner, Agency, the Comptroller General, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the Engineer which are pertinent to the Agreement, for the purpose of making audits, examinations, excerpts, and transcriptions. Engineer shall maintain all required records for three years after final payment is made and all other pending matters are closed.
- C. *Restrictions on Lobbying.* Engineer and each Consultant shall comply with Restrictions on Lobbying (Public Law 101-121, Section 319) as supplemented by applicable Agency regulations. This Law applies to the recipients of contracts and subcontracts that exceed \$100,000 at any tier under a Federal loan that exceeds \$150,000 or a Federal grant that exceeds \$100,000. If applicable, Engineer must complete a certification form on lobbying activities related to a specific Federal loan or grant that is a funding source for this Agreement. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 USC 1352. Each tier shall disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Certifications and disclosures are forwarded from tier to tier up to the Owner. Necessary certification and disclosure forms shall be provided by Owner.

- D. *Suspension and Debarment.* Engineer certifies, by signing this Agreement, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Engineer will not contract with any Consultant for this project if it or its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Necessary certification forms shall be provided by the Owner.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement.

Owner:

Engineer:

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Engineer License or Certificate No. \_\_\_\_\_

State of: \_\_\_\_\_

Address for giving notices:

Address for giving notices:

Designated Representative (see paragraph 8.03.A):

Designated Representative (see paragraph 8.03.A):

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Facsimile Number: \_\_\_\_\_

Facsimile Number: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

**AGENCY CONCURRENCE**

Agency: \_\_\_\_\_

By (Signature): \_\_\_\_\_

Typed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT A**, consisting of  pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_.

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**Owner's Consultant's Services**

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**PART 1 – BASIC SERVICES**

Article 1 of the Agreement is amended and supplemented to include the following agreement of the parties. Engineer shall provide Basic and Additional Services as set forth below.

**A.1.01 Study and Report Phase**

**A. Engineer shall:**

1. Consult with Owner to define and clarify Owner's requirements for the Project and available data.
2. Advise Owner of any need for Owner to provide data or services of the types described in Exhibit B which are not part of Engineer's Basic Services.
3. Identify, consult with, and analyze requirements of governmental authorities having jurisdiction to approve the portions of the Project designed or specified by Engineer, including but not limited to mitigating measures identified in the environmental assessment.
4. Identify and evaluate [insert specific number or list here] all reasonable alternate solutions available to Owner and, after consultation with Owner, recommend to Owner those solutions which in Engineer's judgment meet Owner's requirements for the Project.
5. In accordance with Agency guidance, prepare a preliminary engineering report (the "Report") which will, as appropriate, contain schematic layouts, sketches, operation and maintenance costs, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and those alternate solutions available to Owner which Engineer recommends. For each recommended solution Engineer will provide the following, which will be separately itemized: opinion of probable Construction Cost; proposed allowances for contingencies; the estimated total costs of design, professional, and related services to be provided by Engineer and its Consultants; and, on the basis of information furnished by Owner, a summary of allowances for other items and services included within the definition of Total Project Costs.
6. Perform or provide the following additional Study and Report Phase tasks or deliverables: [here list any such tasks or deliverables]
  - a. Environment Report in accordance with Agency requirements.
  - b. Provide engineering information for applications and supporting documents for private or governmental grants, loans, or advances in connection with the Project.
  - c. Prepare feasibility studies and preliminary ranges of rate schedules if required for the Project.
  - d. \_\_\_\_ *[List others]*
7. Furnish \_\_\_\_ review copies of the Report and any other deliverables to Owner and Agency within \_\_\_\_ calendar days of authorization to begin services and review it with Owner.

8. Revise the Report and any other deliverables in response to Owner's and Agency's comments, as appropriate, and furnish \_\_\_\_\_ copies of the revised Report and any other deliverables to the Owner and Agency within \_\_\_\_\_ calendar days of receipt of all such comments.
- B. Engineer's services under the Study and Report Phase will be considered complete on the date when the revised Report and any other deliverables have been delivered to and accepted by Owner and Agency, as appropriate.

#### A.1.02 *Preliminary Design Phase*

- A. After acceptance by Owner and Agency of the Report and any other deliverables, selection by Owner of a recommended solution and indication of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner, and upon written authorization from Owner, Engineer shall:
1. Prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project.
  2. Provide necessary field surveys and topographic and utility mapping for design purposes. Utility mapping will be based upon information obtained from utility owners.
  3. Provide to Owner three copies of maps showing the general location of required construction easements and permanent easements and the land to be acquired.
  4. Advise Owner if additional reports, data, information, or services of the types described in Exhibit B are necessary and assist Owner in obtaining such reports, data, information, or services.
  5. Based on the information contained in the Preliminary Design Phase documents, prepare a revised opinion of probable Construction Cost, and assist Owner in collating the various cost categories which comprise Total Project Costs.
  6. Perform or provide the following additional Preliminary Design Phase tasks or deliverables: [here list any such tasks or deliverables]
  7. Furnish \_\_\_\_\_ review copies of the Preliminary Design Phase documents and any other deliverables to Owner (and Agency, if required) within \_\_\_\_\_ calendar days of authorization to proceed with this phase, and review them with Owner.
  8. Revise the Preliminary Design Phase documents and any other deliverables in response to comments from Owner (and Agency), as appropriate, and furnish to Owner (and Agency) \_\_\_\_\_ copies of the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables within \_\_\_\_\_ calendar days after receipt of all such comments.
- B. Engineer's services under the Preliminary Design Phase will be considered complete on the date when the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables have been delivered to Owner (and Agency, if required).

#### A.1.03 *Final Design Phase*

- A. After acceptance by Owner (and by Agency, if required) of the Preliminary Design Phase documents, revised opinion of probable Construction Cost as determined in the Preliminary Design Phase, and any other deliverables subject to any Owner-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from Owner, Engineer shall:
1. Prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor. If appropriate, Specifications shall conform to the 16-division format of the Construction Specifications Institute.

2. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of the Project; assist Owner in consultations with such authorities; and revise the Drawings and Specifications in response to directives from such authorities.
  3. Advise Owner of any adjustments to the opinion of probable Construction Cost and any adjustments to Total Project Costs known to Engineer.
  4. Perform or provide the following additional Final Design Phase tasks or deliverables: [here list any such tasks or deliverables]
  5. Prepare and furnish Bidding Documents for review by the Owner, its legal counsel, its other advisors, regulatory agencies, and Agency, within \_\_\_\_\_ calendar days of authorization to proceed with this phase, and assist Owner in the preparation of other related documents. Bidding documents will comply with Agency's requirements in effect as of the date of Owner authorizing work in this phase.
  6. Revise the Bidding Documents in accordance with comments and instructions from the Owner and Agency, as appropriate, and submit \_\_\_\_\_ final copies of the Bidding Documents, a revised opinion of probable Construction Cost, and any other deliverables to Owner and Agency within \_\_\_\_\_ calendar days after receipt of all such comments and instructions.
- B. Engineer's services under the Final Design Phase will be considered complete on the date when the submittals required by paragraph A.1.03.A.6 have been delivered to and accepted by Owner and Agency.
- C. In the event that the Work designed or specified by Engineer is to be performed or furnished under more than one prime contract, or if Engineer's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), Owner and Engineer shall, prior to commencement of the Final Design Phase, develop a schedule for performance of Engineer's services during the Final Design, Bidding or Negotiating, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.
- D. The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is \_\_\_\_\_. If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Agreement.

A.1.04 *Bidding or Negotiating Phase*

- A. After acceptance by Owner and Agency of the Bidding Documents and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by Owner to proceed, Engineer shall:
1. Assist Owner in advertising for and obtaining bids or proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-Bid conferences, if any, and receive and process contractor deposits or charges for the Bidding Documents.
  2. Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.
  3. Provide information or assistance needed by Owner in the course of any negotiations with prospective contractors.
  4. Consult with Owner as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors for those portions of the Work as to which such acceptability is required by the Bidding Documents.

5. Determine the acceptability of substitute materials and equipment proposed when substitution is necessary because the specified item is incompatible with the Project or fails to comply with applicable codes.
  6. Perform or provide the following additional Bidding or Negotiating Phase tasks or deliverables: [here list any such tasks or deliverables]
  7. Attend the Bid opening, prepare Bid tabulation sheets, and assist Owner in evaluating Bids or proposals and in assembling and awarding contracts for the Work.
- B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective contractors (except as may be required if Exhibit F is a part of this Agreement).

A.1.05 *Construction Phase*

- A. Upon successful completion of the Bidding and Negotiating Phase, and upon written authorization from Owner, Engineer shall:
1. *General Administration of Construction Contract.* Consult with Owner and act as Owner's representative as provided in the General Conditions. The extent and limitations of the duties, responsibilities, and authority of Engineer as assigned in the General Conditions shall not be modified, except as Engineer may otherwise agree in writing. All of Owner's instructions to Contractor will be issued through Engineer, which shall have authority to act on behalf of Owner in dealings with Contractor to the extent provided in this Agreement and the General Conditions except as otherwise provided in writing.
  2. *Resident Project Representative (RPR).* Unless otherwise notified in writing by Owner, Engineer shall provide the services of Resident Project Representative (RPR) at the Site to assist Engineer and to provide more continuous observations of such work on a full-time basis unless part-time services are expressly approved by Agency and this Agreement is amended accordingly. Engineer will, prior to the pre-construction conference, submit a resume of the RPR's qualifications for approval by Owner and Agency. The duties, responsibilities, and limitations of authority of the RPR are as set forth in Exhibit D. The furnishing of such Resident Project Representative service will not limit, extend, or modify Engineer's responsibilities or authority except as expressly set forth in Exhibit D.
  3. *Selecting Independent Testing Laboratory.* Assist Owner in the selection of an independent testing laboratory to perform the services identified in Exhibit B, paragraph B.2.01.O.
  4. *Pre-Construction Conference.* Participate in a Pre-Construction Conference prior to commencement of Work at the Site. If RPR services are provided by Engineer, ensure RPR attends Pre-Construction Conference.
  5. *Schedules.* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
  6. *Baselines and Benchmarks.* As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.
  7. *Visits to Site and Observation of Construction.* In connection with observations of Contractor's Work while it is in progress:
    - a. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, but at least monthly, to observe as an experienced and qualified design professional the progress and quality of Contractor's executed Work. Such visits and observations by Engineer, and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of Contractor's Work in progress or to involve detailed inspections of Contractor's Work in progress beyond

the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Contract Documents, and Engineer shall keep Owner informed of the progress of the Work.

- b. The purpose of Engineer's visits to, and representation by the Resident Project Representative, if any, at the Site, will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed Work will conform in general to the Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Engineer shall not, during such visits or as a result of such observations of Contractor's Work in progress, supervise, direct, or have control over Contractor's Work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by Contractor, for security or safety on the Site, for safety precautions and programs incident to Contractor's Work, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.
8. *Defective Work.* Recommend to Owner that Contractor's Work be rejected while it is in progress if, on the basis of Engineer's observations, Engineer believes that such Work will not produce a completed Project that conforms generally to the Contract Documents or that it will threaten the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
9. *Clarifications and Interpretations; Field Orders.* Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Engineer may issue Field Orders authorizing minor variations in the Work from the requirements of the Contract Documents.
10. *Change Orders and Work Change Directives.* Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.
11. *Shop Drawings and Samples.* Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.
12. *Substitutes and "or-equal."* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor, but subject to the provisions of paragraph A.2.01.A.23 of this Exhibit A.
13. *Inspections and Tests.* Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Engineer shall be entitled to rely on the results of such tests.

14. *Disagreements between Owner and Contractor.* Render formal written decisions on all duly submitted issues relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the execution, performance, or progress of Contractor's Work; review each duly submitted Claim by Owner or Contractor, and in writing either deny such Claim in whole or in part, approve such Claim, or decline to resolve such Claim if Engineer in its discretion concludes that to do so would be inappropriate. In rendering such decisions, Engineer shall be fair and not show partiality to Owner or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.
15. *Applications for Payment.* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
- Determine the amounts that Engineer recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the quality of such Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe Contractor's Work. In the case of unit price work, Engineer's recommendations of payment will include final determinations of quantities and classifications of Contractor's Work (subject to any subsequent adjustments allowed by the Contract Documents).
  - By recommending any payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control Contractor's Work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the Work in progress, materials, or equipment has passed to Owner free and clear of any liens, claims, security interests, or encumbrances, or that there may not be other matters at issue between Owner and Contractor that might affect the amount that should be paid.
16. *Contractor's Completion Documents.* Receive, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data approved as provided under paragraph A.1.05.A.11, and the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. The extent of such review by Engineer will be limited as provided in paragraph A.1.05.A.11.
17. *Substantial Completion.* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Owner, the Agency's representative, and Contractor, conduct a pre-final inspection to determine if the Work is substantially complete. If after considering any objections of Owner, Engineer considers the Work substantially complete, Engineer shall deliver a certificate of Substantial Completion to Owner, Agency, and Contractor.
18. *Record Drawings.* Prepare and furnish to Owner a set of reproducible Project Record Drawings showing appropriate record information based on Record Drawing information from Contractor and Project documentation received from RPR.

19. *Additional Tasks.* Perform or provide the following additional Construction Phase tasks or deliverables: [here list any such tasks or deliverables].

20. *Final Notice of Acceptability of the Work.* In company with Owner's and Agency's representative, conduct a final inspection to determine if the completed Work of Contractor is acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide a notice in the form attached hereto as Exhibit E (the "Notice of Acceptability of Work") that the Work is acceptable (subject to the provisions of paragraph A.1.05.A.15.b) to the best of Engineer's knowledge, information, and belief and based on the extent of the services provided by Engineer under this Agreement.

B. *Duration of Construction Phase.* The Construction Phase will commence with the execution of the first construction Contract for the Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractors. If the Project involves more than one prime contract as indicated in paragraph A.1.03.C, Construction Phase services may be rendered at different times in respect to the separate contracts. Subject to the provisions of Article 3, Engineer shall be entitled to an equitable increase in compensation if Construction-Phase services are required after the original date for final completion of the Work as set forth in the construction Contract.

C. *Limitation of Responsibilities.* Engineer shall not be responsible for the acts or omissions of any Contractor, or of any subcontractors, suppliers, or other individuals or entities performing or furnishing any of the Work. Engineer shall not be responsible for the failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.

#### A.1.06 *Post-Construction Phase*

A. Upon written authorization from Owner, Engineer, during the Post-Construction Phase, shall:

1. Provide assistance in connection with the adjusting of Project equipment and systems.
2. Assist Owner in training Owner's staff to operate and maintain Project equipment and systems.
3. Assist Owner in developing procedures for control of the operation and maintenance of, and record keeping for Project equipment and systems.
4. Together with Owner, visit the Project to observe any apparent defects in the Work, assist Owner in consultations and discussions with Contractor concerning correction of any such defects, and make recommendations as to replacement or correction of Defective Work, if present.
5. Perform or provide the following additional Post-Construction Phase tasks or deliverables:
6. [here list any such tasks or deliverables].
7. In company with Owner or Owner's representative, provide an inspection of the Project within one month before the end of the Correction Period for Contractor's Work to ascertain whether any portion of the Work is subject to correction.

B. The Engineer shall provide a total of \_\_\_\_\_ hours of assistance and necessary reimbursable expenses in providing services during the Post-Construction Phase.

C. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate at the end of the Construction Contract's Correction Period.

## PART 2 – ADDITIONAL SERVICES

A.2.01 *Additional Services Requiring Owner's Advance Written Authorization and Agency's Concurrence*

- A. If authorized in writing by Owner, with Agency concurrence, Engineer shall furnish or obtain from others Additional Services of the types listed below.
1. Preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project (which are not part of Basic Services).
  2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.
  3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by Engineer or its design requirements including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of this Agreement or are due to any other causes beyond Engineer's control. Redesign to reduce Project costs to within the funds available as stated in Exhibit F shall not be considered Additional Services.
  4. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those identified in paragraph A.1.01.A.4.
  5. Services required as a result of Owner's providing incomplete or incorrect Project information to Engineer.
  6. Providing renderings or models for Owner's use.
  7. Undertaking investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules, and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing, and assisting Owner in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed by Owner.
  8. Furnishing services of Engineer's Consultants for other than Basic Services.
  9. Services attributable to more prime construction contracts than specified in paragraph A.1.03.C.
  10. Services (which are not part of Basic Services) during out-of-town travel required of Engineer other than for visits to the Site or Owner's office.
  11. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructibility review requested by Owner; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes.
  12. Preparing additional Bidding Documents or Contract Documents for alternate bids or prices requested by Owner for the Work or a portion thereof.
  13. Determining the acceptability of substitute materials and equipment proposed during the Bidding or Negotiating Phase when substitution prior to the award of contracts is allowed by the Bidding Documents.



14. Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services, except when such assistance is required by Exhibit F. Rebidding or renegotiating contracts to reduce the contract costs to funds available as stated in Exhibit F shall not be considered Additional Services.
15. Providing construction surveys and staking to enable Contractor to perform its work other than as required under paragraph A.1.05.A.6, and any type of property surveys or related engineering services needed for the transfer of interests in real property; and providing other special field surveys.
16. Providing Construction Phase services beyond the Contract Times set forth in Exhibit C.
17. Providing assistance in responding to the presence of any Constituent of Concern at the Site, in compliance with current Laws and Regulations.
18. Preparation of operation and maintenance manuals.
19. Preparing to serve or serving as a consultant or witness for Owner in any litigation, arbitration, or other dispute resolution process related to the Project.
20. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.
21. Other services performed or furnished by Engineer not otherwise provided for in this Agreement.
22. Services in connection with Work Change Directives and Change Orders to reflect changes requested by Owner so as to make compensation commensurate with the extent of the Additional Services rendered.
23. Services in making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or-equal" items; and services after the award of the Construction Contract in evaluating and determining the acceptability of a substitution which is found to be inappropriate for the Project or an excessive number of substitutions.
24. Additional or extended services during construction made necessary by (1) emergencies or acts of God endangering the Work, (2) the presence at the Site of any Constituent of Concern, (3) Work damaged by fire or other cause during construction, (4) a significant amount of defective, neglected, or delayed work by Contractor, (5) acceleration of the progress schedule involving services beyond normal working hours, or (6) default by Contractor.
25. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of any part of the Work by Owner prior to Substantial Completion.
26. Evaluating an unreasonable claim or an excessive number of claims submitted by Contractor or others in connection with the Work.

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SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT B**, consisting of ges, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_.

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**Owner's Responsibilities**

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Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

B.2.01 In addition to other responsibilities of Owner as set forth in this Agreement, Owner shall at its expense:

- A. Provide Engineer with all criteria and full information as to Owner's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which Owner will require to be included in the Drawings and Specifications; and furnish copies of Owner's standard forms, conditions, and related documents for Engineer to include in the Bidding Documents, when applicable.
- B. Furnish to Engineer any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.
- C. Following Engineer's assessment of initially-available Project information and data and upon Engineer's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable Engineer to complete its Basic and Additional Services. Such additional information or data would generally include the following:
  - 1. Property descriptions.
  - 2. Zoning, deed, and other land use restrictions.
  - 3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
  - 4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.
  - 5. Environmental assessments, audits, investigations, and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas, if not part of Engineer's services.
  - 6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.
- D. Give prompt written notice to Engineer whenever Owner observes or otherwise becomes aware of the presence at the Site of any Constituent of Concern, or of any other development that affects the scope or time of performance of Engineer's services, or any defect or nonconformance in Engineer's services, the Work, or in the performance of any Contractor.
- E. Furnish as appropriate other services or authorize Engineer to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as required.
- F. Arrange for safe access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under the Agreement.

- G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as Owner deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.
- H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by Engineer and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.
- I. Provide, as required for the Project:
1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.
  2. Legal services with regard to issues pertaining to the Project as Owner requires, Contractor raises, or Engineer reasonably requests.
  3. Such auditing services as Owner requires to ascertain how or for what purpose Contractor has used the moneys paid.
  4. Placement and payment for advertisement for Bids in appropriate publications.
- J. Advise Engineer of the identity and scope of services of any independent consultants employed by Owner to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructibility review.
- K. Furnish to Engineer data as to Owner's anticipated costs for services to be provided by others (including, but not limited to, accounting, bond and financial, independent cost estimating, insurance counseling, and legal advice) for Owner so that Engineer may assist Owner in collating the various cost categories which comprise Total Project Costs.
- L. If Resident Project Representative services are not to be provided pursuant to paragraph A.1.05.A.2 or otherwise, provide a qualified representative to observe the progress and quality of the Work.
- M. If Owner designates a construction manager or an individual or entity other than, or in addition to, Engineer to represent Owner at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of Engineer.
- N. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.
- O. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of Samples, materials, and equipment required by the Contract Documents, or to evaluate the performance of materials, equipment, and facilities of Owner, prior to their incorporation into the Work with appropriate professional interpretation thereof.
- P. Provide inspection or monitoring services by an individual or entity other than Engineer (and disclose the identity of such individual or entity to Engineer) as Owner determines necessary to verify:
1. that Contractor is complying with any Laws or Regulations applicable to Contractor's performing and furnishing the Work; or
  2. that Contractor is taking all necessary precautions for safety of persons or property and complying with any special provisions of the Contract Documents applicable to safety.

- Q. Provide Engineer with the findings and reports generated by the entities providing services to Owner pursuant to paragraphs B.2.01.O and P.
- R. Perform or provide the following additional services: [here list any such tasks or deliverables].

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**COMPENSATION DECISION GUIDE  
FOR USE WITH EXHIBIT C TO EJCDC E-510, 2002 EDITION**

1. **Compensation for Basic Services (not including Resident Project Representative Services)**

Decision Question: Which method of compensation is to be used?

|                   | Lump Sum           | Standard Hourly Rates            | Percent of Construction Costs |
|-------------------|--------------------|----------------------------------|-------------------------------|
| Use These Sheets  | Sheets C-2 and C-3 | Sheets C-4 and C-5               | Sheets C-6 and C-7            |
| Use This Appendix | N/A                | Appendices 1 (C-13) and 2 (C-14) | N/A                           |

2. **Compensation for Resident Project Representative Services**

Decision Question: Which method of compensation is to be used?

|                   | Lump Sum  | Standard Hourly Rates            | Percent of Construction Costs |
|-------------------|-----------|----------------------------------|-------------------------------|
| Use These Sheets  | Sheet C-8 | Sheets C-9 and C-10              | Sheet C-11                    |
| Use This Appendix | N/A       | Appendices 1 (C-13) and 2 (C-14) | N/A                           |

3. **Compensation for Additional Services**

Compensation for Additional Services shall be based on standard hourly rates.

|                   | Standard Hourly Rates            |
|-------------------|----------------------------------|
| Use These Sheets  | Sheet C-12                       |
| Use This Appendix | Appendices 1 (C-13) and 2 (C-14) |

Example: If Basic Services (other than RPR Services) will be compensated using Lump Sum; RPR Services using Percent of Construction Costs; and Additional Services using Standard Hourly Rates; then use only Sheets C-2 and C-3; C-11; C-12; Appendix 1 (Sheet C-13), and Appendix 2 (Sheet C-14) to form Exhibit C.

SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_.

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**Payments to Engineer for Services and Reimbursable Expenses**

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Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C.2.01 Compensation for Basic Services (other than Resident Project Representative Services) – Lump Sum Method of Payment**

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative, if any, as follows:
1. For services performed or furnished under paragraph A.1.01, the Lump Sum amount of \_\_\_\_\_ Dollars (\$\_\_\_\_) after the Study and Report Phase Services are considered complete as defined in Exhibit A.
  2. For services performed or furnished under paragraphs A.1.02 through A.1.06 (excluding the services of the Resident Project Representative), the Lump Sum amount of \_\_\_\_\_ Dollars (\$\_\_\_\_).
  3. The Lump Sum compensation for services performed or furnished under paragraphs A.1.02 through A.1.06 shall be payable as follows:
    - a. A sum which equals 30 percent of the Lump Sum compensation payable under paragraph C.2.01.A.2, above, after the Preliminary Design Phase documents are revised and submitted to Owner (and Agency, if required).
    - b. A sum which, together with the compensation provided under paragraph C.2.01.A.3.a, equals 50 percent of the Lump Sum compensation payable under paragraph C.2.01.A.2, after the Final Design Phase documents are completed and submitted to Owner and Agency.
    - c. A sum which, together with the compensation provided under paragraph C.2.01.A.3.a and b, equals 70 percent of the Lump Sum compensation payable under paragraph C.2.01.A.2, after Final Design Phase services are considered complete as defined in Exhibit A.
    - d. A sum which, together with the compensation provided in paragraphs C.2.01.A.3.a, b, and c, equals 80 percent of the Lump Sum compensation payable under paragraph C.2.01.A.2, after Bidding or Negotiating Phase services are considered complete as defined in Exhibit A.
    - e. A sum equal to 15 percent of the Lump Sum compensation payable under paragraph C.2.01.A.2 will be paid for general engineering review of the Contractor's Work during the construction period on percentage ratios identical to those approved by the Engineer as a basis upon which to make partial payments to the Contractor(s). Payments will be made on a monthly basis. However, payment under this paragraph will be in an amount such that the aggregate of the sums paid to the Engineer under paragraphs C.2.01.A.3.a through C.2.01.A.3.e will equal 95 percent of the Lump Sum amount stipulated in paragraph C.2.01.A.2.

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(Exhibit C – Compensation for Basic Services (other than Resident Project Representative Services) –  
Lump Sum Method of Payment

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- f. A final payment which, together with the compensation provided in paragraphs C.2.01.A.3.a through C.2.01.A.3.e, equals 100 percent of the Lump Sum compensation payable under paragraph C.2.01.A.2. shall be made when it is determined that all services required under paragraphs A.1.02 through A.1.05 have been completed. Such payment includes payment for Post-Construction Phase services under paragraph A.1.06. Engineer remains responsible to Owner for the technical adequacy and completeness of such services.
4. The Lump Sum includes compensation for Engineer's services and services of Engineer's Consultants, if any. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses.
- B. Period of Service. The compensation amount stipulated in paragraph C.2.01.A.2 is conditioned on a period of service not exceeding \_\_\_\_\_ months. Should such period of service be extended, the compensation amount for Engineer's services shall be appropriately adjusted.

C.2.02 [Not Used]

C.2.03 [Not Used]

SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_ pages, referred to in and part of  
the **Agreement between Owner and Engineer for Professional  
Services** dated \_\_\_\_.

**Payments to Engineer for Services and Reimbursable Expenses**

---

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C.2.01 Compensation for Basic Services (other than Resident Project Representative Services) – Standard Hourly Rates Method of Payment**

A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative, if any, as follows:

1. An amount equal to the cumulative hours charged to the Project by each class of Engineer’s employees times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus Reimbursable Expenses and Engineer’s Consultant’s charges, if any.
2. Engineer’s Reimbursable Expenses Schedule and Standard Hourly Rates are attached to this Exhibit C as Appendices 1 and 2.
3. The total compensation for services under paragraph C.2.01 is estimated to be \$ \_\_\_\_ based on the following assumed distribution of compensation:
  - a. Study and Report Phase \$ \_\_\_\_
  - b. Preliminary Design Phase \$ \_\_\_\_
  - c. Final Design Phase \$ \_\_\_\_
  - d. Bidding or Negotiating Phase \$ \_\_\_\_
  - e. Construction Phase \$ \_\_\_\_
  - f. Post Construction \$ \_\_\_\_
4. Engineer may alter the distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered, but shall not exceed the total estimated compensation amount unless approved in writing by Owner, with Agency concurrence.
5. The total estimated compensation for Engineer’s services included in the breakdown by phases as noted in paragraph C.2.01.A.3 incorporates all labor, overhead, profit, Reimbursable Expenses and Engineer’s Consultant’s charges.
6. The amounts billed for Engineer’s services under paragraph C.2.01 will be based on the cumulative hours charged to the Project during the billing period by each class of Engineer’s employees times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses and Engineer’s Consultant’s charges.
7. The Standard Hourly Rates and Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_ ) to reflect equitable changes in the compensation payable to Engineer.

**C.2.02 Compensation for Reimbursable Expenses**

A. Owner shall pay Engineer for all Reimbursable Expenses at the rates set forth in Appendix 1 to this Exhibit C.

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(Exhibit C – Compensation for Basic Services (other than Resident Project Representative Services) –  
Standard Hourly Rates Method of Payment

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- B. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
- C. The amounts payable to Engineer for Reimbursable Expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to the Project, the latter multiplied by a Factor of \_\_\_\_.

C.2.03 *Other Provisions Concerning Payment*

- A. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a Factor of \_\_\_\_.
- B. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
- C. Estimated Compensation Amounts
  - 1. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  - 2. Engineer is responsible for monitoring charges being generated under this Agreement. When estimated amounts for total compensation or individual phases of the work have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed.
- D. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT C**, consisting of \_\_\_\_ pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_.

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**Payments to Engineer for Services and Reimbursable Expenses**

---

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties:

**ARTICLE 2 – OWNER’S RESPONSIBILITIES**

**C.2.01 Compensation for Basic Services (other than Resident Project Representative Services) – Percentage of Construction Cost Method of Payment**

- A. Owner shall pay Engineer for Basic Services set forth in Exhibit A, except for services of Engineer’s Resident Project Representative, if any, as follows:
1. For services performed or furnished under paragraph A.1.01, the Lump Sum amount of \_\_\_\_\_ Dollars (\$\_\_\_\_) after the Study and Report Phase Services are considered complete as defined in Exhibit A.
  2. For services performed or furnished under paragraphs A.1.02 through A.1.06 (excluding the services of the Resident Project Representative), an amount equal to \_\_\_\_\_ percent of the Construction Cost. Accordingly the estimated total compensation will be \$\_\_\_\_\_.
  3. The Percent of Construction Cost compensation for services performed or furnished under paragraphs A.1.02 through A.1.06 shall be payable as follows:
    - a. A sum which equals 30 percent of the total compensation payable under paragraph C.2.01.A.2, after the Preliminary Design Phase documents are revised and submitted to Owner (and Agency, if required).
    - b. A sum which, together with the compensation provided under paragraph C.2.01.A.3.a, equals 50 percent of the total compensation payable under paragraph C.2.01.A.2, after the Final Design Phase documents are completed and submitted to Owner and Agency.
    - c. A sum which, together with the compensation provided under paragraph C.2.01.A.3.a and b, equals 70 percent of the total compensation payable under paragraph C.2.01.A.2, after Final Design Phase services are considered complete as defined in Exhibit A.
    - d. A sum which, together with the compensation provided in paragraphs C.2.01.A.3.a, b, and c, equals 80 percent of the total compensation payable under paragraph C.2.01.A.2, after Bidding or Negotiating Phase services are considered complete as defined in Exhibit A.
    - e. A sum equal to 15 percent of the total compensation payable under paragraph C.2.01.A.2 will be paid for general engineering review of the Contractor's Work during the construction period on percentage ratios identical to those approved by the Engineer as a basis upon which to make partial payments to the Contractor(s). Payments will be made on a monthly basis. However, payment under this paragraph and of such additional sums as are due the Engineer by reason of any necessary adjustments in the payment computations will be in an amount so that the aggregate of the sums paid to the Engineer under paragraphs C.2.01.A.3.a through C.2.01.A.3.e will equal 95 percent of the total compensation payable under paragraph C.2.01.A.2 as appropriately adjusted to reflect the actual Construction Cost incurred by Owner.

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(Exhibit C – Compensation for Basic Services (other than Resident Project Representative Services) –  
Percentage of Construction Cost Method of Payment

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- f. A final payment which, together with the compensation provided in paragraphs C.2.01.A.3.a through C.2.01.A.3.e, equals 100 percent of the total compensation payable under paragraph C.2.01.A.2, shall be made when it is determined that all services required by this Agreement under paragraphs A.1.02 through A.1.05 have been completed. Such payment includes payment for Post Construction phase services under paragraph A.1.06. Engineer remains responsible to Owner for the technical adequacy and completeness of such services.
4. Progress invoicing prior to award of the Construction Agreement shall be based on Engineer's most recent estimate of probable Construction Cost for the Project, with appropriate adjustment upon award of the Construction Agreement(s). The initial construction award amount shall set the percentage figure to be applied in making such adjustments, and shall remain constant thereafter regardless of the impact of Change Orders. Final invoicing shall be based on final Construction Cost, including all Change Orders.
5. As a basis for payment to Engineer, Construction Cost will be based on one or more of the following determinations with precedence in the order listed for Work designed or specified by Engineer:
- For Work designed or specified and incorporated in the completed Project, the actual final cost of the work performed by Contractor and paid by Owner.
  - For Work designed or specified but not constructed, the lowest bona fide Bid received from a qualified bidder for such Work; or, if the Work is not bid, the lowest bona fide negotiated proposal for such Work.
  - For Work designed or specified but not constructed upon which no such Bid or proposal is received, Engineer's most recent opinion of probable Construction Cost.
  - Labor furnished by Owner for the Project will be included in the Construction Cost at current market rates including a reasonable allowance for overhead and profit. Materials and equipment furnished by Owner will be included at current market prices.
  - No deduction is to be made from Engineer's compensation on account of any penalty, liquidated damages, or other amounts withheld from payments to Contractor(s).

C.2.02 [Not used]

C.2.03 [Not used]

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(for use with E-510, 2002 Edition)

C.2.04 *Compensation for Resident Project Representative Services – Lump Sum Method of Payment*

A. Owner shall pay Engineer for Resident Project Representative Services as follows:

1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under paragraph A.1.05 of Exhibit A, the Lump Sum amount of \$\_\_\_\_. The Lump Sum includes compensation for the Resident Project Representative's services, and for the services of any direct assistants to the Resident Project Representative. Appropriate amounts have been incorporated in the Lump Sum to account for labor, overhead, profit, and Reimbursable Expenses related to the Resident Project Representative's Services.
2. The total compensation for Resident Project Representative services is predicated on the Contract Times not exceeding \_\_\_\_ months and such compensation shall not be exceeded without written approval of Owner and concurrence of Agency.
3. Payment for Resident Project Representative Services shall be on a monthly basis prorated according to the number of months stated in C.2.04.A.2.

SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

C.2.04 *Compensation For Resident Project Representative Services – Standard Hourly Rates Method of Payment*

A. Owner shall pay Engineer for Resident Project Representative Services as follows:

1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under paragraph A.1.05A of Exhibit A, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all Resident Project Representative services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be \$\_\_\_\_\_ based upon Contract Times as set forth herein.

B. Compensation for Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under paragraph C.2.01, and are directly related to the provision of Resident Project Representative Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; subsistence and transportation of Resident Project Representative and assistants; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be those internal expenses related to the Resident Project Representative Services that are actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such services, the latter multiplied by a Factor of \_\_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

C. Other Provisions Concerning Payment Under this Paragraph C.2.04

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a Factor of \_\_\_\_\_.
2. Factors. The external Reimbursable Expenses and Engineer's Consultant's factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. Estimated Compensation Amounts
  - a. Engineer's estimate of the amounts that will become payable for specified services are only estimates for planning purposes, are not binding on the parties, and are not the minimum or maximum amounts payable to Engineer under the Agreement.
  - b. Engineer is responsible for monitoring charges generated under this Agreement. When estimated compensation amounts have been stated herein and it subsequently becomes apparent to Engineer that a compensation amount thus estimated will be exceeded, Engineer shall give Owner written notice thereof. Promptly thereafter Owner and Engineer shall review the matter of services remaining to be performed

and compensation for such services. Owner shall either agree to such compensation exceeding said estimated amount or Owner and Engineer shall agree to a reduction in the remaining services to be rendered by Engineer, so that total compensation for such services will not exceed said estimated amount when such services are completed.

4. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

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SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

C.2.04 *Compensation for Resident Project Representative Services – Percentage of Construction Cost Method of Payment*

A. Owner shall pay Engineer for:

1. *Resident Project Representative Services.* For services of Engineer's Resident Project Representative, if any, under paragraph A.1.05 of Exhibit A of the Agreement, an amount equal to \_\_\_\_ percent of the Construction Cost. This amount includes compensation for Resident Project Representative's services, and those of any assistants to the Resident Project Representative. The percentage of Construction Cost noted herein accounts for labor, overhead, profit, and Reimbursable Expenses.
2. The total compensation for Resident Project Representative services is predicated on the Contract Times not exceeding \_\_\_\_ months and such compensation shall not be exceeded without written approval of Owner and concurrence of Agency.
3. Payment for Resident Project Representative Services shall be on a monthly basis prorated according to the number of months stated in C.2.04.A.2.
4. As a basis for payment to Engineer, Construction Cost will be based on one or both of the following determinations. No deduction is to be made from Engineer's compensation on account of any penalty, liquidated damages, or other amounts withheld from payments to Contractor(s).
  - a. For Work incorporated in the completed Project but not limited to that furnished by Owner itself, the current market value of the labor material, and equipment furnished.
  - b. For other Project construction, including but not limited to that furnished by Owner itself, the current market value of the labor, materials, and equipment furnished.

SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

C.2.05 *Compensation for Additional Services – Standard Hourly Rates Method of Payment*

A. Owner shall pay Engineer for Additional Services, if any, as follows:

1. *General.* For services of Engineer's employees engaged directly on the Project pursuant to paragraph A.2.01 or A.2.02 of Exhibit A, except for services as a consultant or witness under paragraph A.2.01.A.20, an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times Standard Hourly Rates for each applicable billing class for all Additional Services performed on the Project, plus related Reimbursable Expenses and Engineer's Consultant's charges, if any. The total compensation under this paragraph is estimated to be \$\_\_\_\_\_ and this amount shall not be exceeded without written approval of Owner and concurrence of Agency.

B. Compensation for Reimbursable Expenses

1. For those Reimbursable Expenses that are not accounted for in the compensation for Basic Services under paragraph C.2.01 and are directly related to the provision of Additional Services, Owner shall pay Engineer at the rates set forth in Appendix 1 to this Exhibit C.
2. Reimbursable Expenses include the following categories: transportation and subsistence incidental thereto; obtaining bids or proposals from Contractor(s); providing and maintaining field office facilities including furnishings and utilities; toll telephone calls and mobile phone charges; reproduction of reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Exhibit A, and, if authorized in advance by Owner, overtime work requiring higher than regular rates. In addition, if authorized in advance by Owner, Reimbursable Expenses will also include expenses incurred for computer time and the use of other highly specialized equipment.
3. The amounts payable to Engineer for Reimbursable Expenses, if any, will be the Additional Services-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external Reimbursable Expenses allocable to such Additional Services, the latter multiplied by a Factor of \_\_\_\_\_.
4. The Reimbursable Expenses Schedule will be adjusted annually (as of \_\_\_\_\_) to reflect equitable changes in the compensation payable to Engineer.

C. Other Provisions Concerning Payment For Additional Services

1. Whenever Engineer is entitled to compensation for the charges of Engineer's Consultants, those charges shall be the amounts billed by Engineer's Consultants to Engineer times a Factor of \_\_\_\_\_.
2. *Factors.* The external Reimbursable Expenses and Engineer's Consultant's Factors include Engineer's overhead and profit associated with Engineer's responsibility for the administration of such services and costs.
3. To the extent necessary to verify Engineer's charges and upon Owner's timely request, Engineer shall make copies of such records available to Owner at cost.

This is **Appendix 1 to EXHIBIT C**, consisting of \_\_\_\_ pages, referred to in and part of the **Agreement Between Owner and ENGINEER for Professional Services** dated \_\_\_\_.

### Reimbursable Expenses Schedule

Current agreements for engineering services stipulate that the Reimbursable Expenses are subject to review and adjustment per Exhibit C. Reimbursable expenses for services performed on the date of the Agreement are:

|   |                                |
|---|--------------------------------|
| FAX                                       | \$ ____/page                   |
| 8½"x11" Copies/Impression                 | \$ ____/page                   |
| Blue Print Copies                         | \$ ____/sq. ft.                |
| Reproducible Copies (Mylar)               | \$ ____/sq. ft.                |
| Reproducible Copies (Paper)               | \$ ____/sq. ft.                |
| Mileage (auto)                            | \$ ____/mile                   |
| Field Truck Daily Charge                  | \$ ____/day                    |
| Mileage (Field Truck)                     | \$ ____/mile                   |
| Field Survey Equipment                    | \$ ____/day                    |
| Confined Space Equipment                  | \$ ____/day plus expenses      |
| Resident Project Representative Equipment | \$ ____/month                  |
| Computer CPU Charge                       | \$ ____/hour                   |
| Specialized Software                      | \$ ____/hour                   |
| Personal Computer Charge                  | \$ ____/hour                   |
| CAD Charge                                | \$ ____/hour                   |
| CAE Terminal Charge                       | \$ ____/hour                   |
| VCR and Monitor Charge                    | \$ ____/week, or \$ ____/month |
| Video Camcorder                           | \$ ____/day, plus \$ ____/tape |
| Electrical Meters Charge                  | \$ ____/week, or \$ ____/month |
| Flow Meter Charge                         | \$ ____/week, or \$ ____/month |
| Rain Gauge                                | \$ ____/week, or \$ ____/month |
| Sampler Charge                            | \$ ____/week, or \$ ____/month |
| Dissolved Oxygen Tester Charge            | \$ ____/week                   |
| Fluorometer                               | \$ ____/week                   |
| Laboratory Pilot Testing Charge           | \$ ____/week, or \$ ____/month |
| Soil Gas Kit                              | \$ ____/day                    |
| Submersible Pump                          | \$ ____/day                    |
| Water Level Meter                         | \$ ____/day, or \$ ____/month  |
| Soil Sampling                             | \$ ____/sample                 |
| Groundwater Sampling                      | \$ ____/sample                 |
| Health and Safety Level D                 | \$ ____/day                    |
| Health and Safety Level C                 | \$ ____/day                    |
| Electronic Media Charge                   | \$ ____/hour                   |
| Long Distance Phone Calls                 | at cost                        |
| Mobile Phone                              | \$ ____/day                    |
| Meals and Lodging                         | at cost                        |

(Appendix 1 to Exhibit C – Reimbursable Expenses Schedule)

EJCDC E-510 Standard Form of Agreement Between Owner and Engineer for Professional Services, Funding Agency Edition  
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This is **Appendix 2 to EXHIBIT C**, consisting of \_\_\_\_ pages, referred to in and part of the **Agreement Between Owner and Engineer for Professional Services** dated \_\_\_\_.

### **Standard Hourly Rates Schedule**

#### **A. Standard Hourly Rates**

1. Standard Hourly Rates are set forth in this Appendix 2 to this Exhibit C and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.
2. The Standard Hourly Rates will be adjusted annually (as of \_\_\_\_ ) to reflect equitable changes in the compensation payable to Engineer.
3. The Standard Hourly Rates apply only as specified in Article C2.

#### **B. Schedule**

Hourly rates for services performed on or after the date of Agreement are:

|                 |                  |              |
|-----------------|------------------|--------------|
| Billing Class 9 | Senior Associate | \$ ____/hour |
| Billing Class 8 | Staff Manager    | \$ ____/hour |
| Billing Class 7 | Professional VI  | \$ ____/hour |
| Billing Class 6 | Professional V   | \$ ____/hour |
| Billing Class 5 | Professional IV  | \$ ____/hour |
| Billing Class 4 | Professional III | \$ ____/hour |
| Billing Class 3 | Professional II  | \$ ____/hour |
| Billing Class 2 | Technician II    | \$ ____/hour |
| Billing Class 1 | Technician I     | \$ ____/hour |
| Principal       |                  | \$ ____/hour |
| Support Staff   |                  | \$ ____/hour |

SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT D**, consisting of ges, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_.

***Note to User: Delete this Exhibit D if Engineer will not be providing Resident Project Representative Services under paragraph A.1.05.***

---

**Duties, Responsibilities and Limitations of Authority of Resident Project Representative**

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Paragraph 1.01.A of the Agreement is amended and supplemented to include the following agreement of the parties:

**D.1.01 Resident Project Representative**

- A. Engineer shall furnish a Resident Project Representative (“RPR”), assistants, and other field staff to assist Engineer in observing progress and quality of the Work. The RPR, assistants, and other field staff under this Exhibit D shall provide full time representation unless representation to a lesser degree is approved by Agency.
- B. Through such additional observations of Contractor’s work in progress and field checks of materials and equipment by the RPR and assistants, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the Work. However, Engineer shall not, during such visits or as a result of such observations of Contractor’s work in progress, supervise, direct, or have control over the Contractor’s work nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures selected or used by Contractor, for security or safety at the Site, for safety precautions and programs incident to the Contractor’s work in progress, for any failure of Contractor to comply with Laws and Regulations applicable to Contractor’s performing and furnishing the Work, or responsibility for Contractor’s failure to furnish and perform the Work in accordance with the Contract Documents. In addition, the specific terms set forth in section A.1.05 of Exhibit A of the Agreement are applicable.
- C. The duties and responsibilities of the RPR are as follows:
  - 1. *General:* RPR is Engineer’s agent at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR’s actions. RPR’s dealings in matters pertaining to the Contractor’s work in progress shall in general be with Engineer and Contractor, keeping Owner advised as necessary. RPR’s dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner with the knowledge of and under the direction of Engineer.
  - 2. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
  - 3. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
  - 4. *Liaison:*
    - a. Serve as Engineer’s liaison with Contractor, working principally through Contractor’s superintendent, assist in providing information regarding the intent of the Contract Documents.
    - b. Assist Engineer in serving as Owner’s liaison with Contractor when Contractor’s operations affect Owner’s on-Site operations.

- c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
- 5. *Interpretation of Contract Documents:* Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
- 6. *Shop Drawings and Samples:*
  - a. Record date of receipt of Samples and approved Shop Drawings.
  - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
  - c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.
- 7. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
- 8. *Review of Work and Rejection of Defective Work:*
  - a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
  - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
- 9. *Inspections, Tests, and System Startups:*
  - a. Consult with Engineer in advance of scheduled major inspections, tests, and systems startups of important phases of the Work.
  - b. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
  - c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
  - d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to Engineer.
- 10. *Records:*
  - a. Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and

interpretations of the Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to Contractor, and other Project-related documents.

- b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
- c. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, subcontractors, and major suppliers of materials and equipment.
- d. Maintain records for use in preparing Project documentation.
- e. Upon completion of the Work, furnish original set of all RPR Project documentation to Engineer.

11. *Reports:*

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.
- d. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Constituent of Concern.

12. *Payment Requests:* Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

13. *Certificates, Operation and Maintenance Manuals:* During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. *Completion:*

- a. Participate in a Substantial Completion (pre-final) inspection, and assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.
- b. Observe Contractor-arranged inspections required by Laws and Regulations applicable to the Work, including but not limited to those performed by public agencies having jurisdiction over the Work.
- c. Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.
- d. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

D. Resident Project Representative shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including “or-equal” items).
2. Exceed limitations of Engineer’s authority as set forth in the Agreement or the Contract Documents.
3. Undertake any of the responsibilities of Contractor, subcontractors, suppliers, or Contractor’s superintendent.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor’s work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.



SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT E**, consisting of ges, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_.

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**NOTICE OF ACCEPTABILITY OF WORK**

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PROJECT: \_\_\_\_\_

OWNER: \_\_\_\_\_

OWNER'S CONSTRUCTION CONTRACT IDENTIFICATION: \_\_\_\_\_

EFFECTIVE DATE OF THE CONSTRUCTION AGREEMENT: \_\_\_\_\_

CONSTRUCTION CONTRACT DATE: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

To: \_\_\_\_\_  
OWNER

And To: \_\_\_\_\_  
AGENCY

And To: \_\_\_\_\_  
CONTRACTOR

---

The Engineer hereby gives notice to the above Owner, Agency, and Contractor that the completed Work furnished and performed by Contractor under the above Contract is acceptable, expressly subject to the provisions of the related Contract Documents, the Agreement between Owner and Engineer for Professional Services dated \_\_\_\_, and the terms and conditions set forth on the reverse side of this Notice.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Dated: \_\_\_\_\_

(Reverse side of Notice)

**CONDITIONS OF NOTICE OF ACCEPTABILITY OF WORK**

The Notice of Acceptability of Work ("Notice") on the front side of this sheet is expressly made subject to the following terms and conditions to which all persons who receive said Notice and rely thereon agree:

1. This Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. This Notice reflects and is an expression of the professional judgment of Engineer.
3. This Notice is given as to the best of Engineer's knowledge, information, and belief as of the date hereof.
4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor's work) under Engineer's Agreement with Owner and under the Construction Contract referred to on the front side of this Notice, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Agreement and Construction Contract.
5. This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract referred to on the front side of this Notice, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Contract Documents.

SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT F**, consisting of  ges, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_.

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**Construction Cost Limit**

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Paragraph 5.02 of the Agreement is amended and supplemented to include the following agreement of the parties:

**F.5.02** *Designing to Construction Cost Limit*

- A. Owner and Engineer hereby agree to a Construction Cost limit in the amount of Dollars (\$\_\_\_\_\_).
- B. A bidding or negotiating contingency of \_\_\_\_\_ percent will be added to any Construction Cost limit established.
- C. The acceptance by Owner at any time during Basic Services of a revised opinion of probable Construction Cost in excess of the then established Construction Cost limit will constitute a corresponding increase in the Construction Cost limit.
- D. Engineer will be permitted to determine what types and quality of materials, equipment and component systems are to be included in the Drawings and Specifications. Engineer may make reasonable adjustments in the scope, extent, and character of the Project to the extent consistent with the Project requirements and sound engineering practices, to bring the Project within the Construction Cost limit.
- E. If the Bidding or Negotiating Phase has not commenced within three months after completion of the Final Design Phase, or if industry-wide prices are changed because of unusual or unanticipated events affecting the general level of prices or times of delivery in the construction industry, the established Construction Cost limit will not be binding on Engineer. In such cases, Owner shall consent to an adjustment in the Construction Cost limit commensurate with any applicable change in the general level of prices in the construction industry between the date of completion of the Final Design Phase and the date on which proposals or Bids are sought.
- F. If the lowest bona fide proposal or Bid exceeds the established Construction Cost limit, Owner shall (1) give written approval to increase such Construction Cost limit, or (2) authorize negotiating or rebidding the Project within a reasonable time, or (3) cooperate in revising the Project's scope, extent, or character to the extent consistent with the Project's requirements and with sound engineering practices. In the case of (3), Engineer shall modify the Contract Documents as necessary to bring the Construction Cost within the Construction Cost Limit.
- G. All services of Engineer in respect of paragraph F.5.02.F shall be at the sole expense of Engineer. The providing of such services will be the limit of Engineer's responsibility in this regard and, having done so, Engineer shall be entitled to payment for services and expenses in accordance with this Agreement and will not otherwise be liable for damages attributable to the lowest bona fide proposal or bid exceeding the established Construction Cost.

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SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT G**, consisting of ges, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_.

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**Insurance**

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Paragraph 6.04 of the Agreement is amended and supplemented to include the following agreement of the parties:

G.6.04 *Insurance*

A. The limits of liability for the insurance required by paragraph 6.04 and 6.04.B of the Agreement are as follows:

1. By Engineer:

- |   |           |
|---|-----------|
| a. Workers' Compensation:                                     | Statutory |
| b. Employer's Liability –                                     |           |
| 1) Each Accident:   | \$ _____  |
| 2) Disease, Policy Limit:                                     | \$ _____  |
| 3) Disease, Each Employee:                                    | \$ _____  |
| c. General Liability –  |           |
| 1) Each Occurrence (Bodily Injury and Property Damage):       | \$ _____  |
| 2) General Aggregate:   | \$ _____  |
| d. Excess Umbrella Liability –                                |           |
| 1) Each Occurrence:   | \$ _____  |
| 2) General Aggregate:   | \$ _____  |
| e. Automobile Liability                                       |           |
| 1) Bodily Injury:   |           |
| a) Each Accident  | \$ _____  |
| 2) Property Damage  |           |
| a) Each Accident  | \$ _____  |
| [or]  |           |
| 1) Combined Single Limit (Bodily Injury and Property Damage): |           |
| a) Each Accident  | \$ _____  |
| f. Professional Liability Insurance                           | \$ _____  |
| 1) Each Claim Made:   | \$ _____  |
| 2) Annual Aggregate:  | \$ _____  |
| g. Other (specify):   | \$ _____  |
| _____   |           |

2. By Owner:

- a. Workers' Compensation: Statutory
- b. Employer's Liability –  
1) Each Accident: \$ \_\_\_\_\_  
2) Disease, Policy Limit: \$ \_\_\_\_\_  
3) Disease, Each Employee: \$ \_\_\_\_\_
- c. General Liability –  
1) General Aggregate: \$ \_\_\_\_\_  
2) Each Occurrence (Bodily Injury and Property Damage): \$ \_\_\_\_\_
- d. Excess Umbrella Liability –  
1) Each Occurrence: \$ \_\_\_\_\_  
2) General Aggregate: \$ \_\_\_\_\_
- e. Automobile Liability –  
1) Bodily Injury:  
a) Each Accident \$ \_\_\_\_\_  
2) Property Damage  
a) Each Accident \$ \_\_\_\_\_
- [or]
- 3) Combined Single Limit (Bodily Injury and Property Damage):  
a) Each Accident \$ \_\_\_\_\_
- f. Other (specify): \$ \_\_\_\_\_  
\_\_\_\_\_

B. Additional Insureds.

1. The following persons or entities are to be listed on Owner's general liability and property policies of insurance as additional insureds, as provided in paragraph 6.04.B:
- a. \_\_\_\_\_  
Engineer
- b. \_\_\_\_\_  
Engineer's Consultant
- c. \_\_\_\_\_  
Engineer's Consultant
2. During the term of this Agreement the Engineer shall notify Owner of any other Consultant to be listed as an additional insured on Owner's general liability and property policies of insurance.
3. The Owner shall be listed on Engineer's general liability policy as provided in paragraph 6.04.A.

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(for use with E-510, 2002 Edition)

This is **EXHIBIT H**, consisting of  pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_.

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**Dispute Resolution**

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Paragraph 6.08 of the Agreement is amended and supplemented to include the following agreement of the parties:

**H.6.08 Dispute Resolution**

- A. Mediation. Owner and Engineer agree that they shall first submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof ("Disputes") to mediation by \_\_\_\_\_ *[insert name of mediator, or mediation service]*.

If such mediation is unsuccessful in resolving a Dispute, then (1) all dispute in which more than \$200,000 is in controversy may be resolved only by a court of competent jurisdiction, (2) for disputes of less than \$200,000, the parties may mutually agree to a dispute resolution method of their choice, including but not limited to arbitration pursuant to the terms of paragraph H.6.08.B or (3) in any case either party may seek to have the Dispute resolved by a court of competent jurisdiction.

- B. Arbitration. If the parties mutually agree, and the amount in controversy is less than \$200,000 the Disputes between Owner and Engineer shall be settled by arbitration in accordance with the \_\_\_\_\_ *[here insert the name of a specified arbitration service or organization]* rules effective at the Effective Date of the Agreement, subject to the conditions stated below. This agreement to arbitrate and any other agreement or consent to arbitrate entered into in accordance with this paragraph H.6.08.A will be specifically enforceable under prevailing law of any court having jurisdiction.

1. Notice of the demand for arbitration must be filed in writing with the other party to the Agreement and with the \_\_\_\_\_ *[specified arbitration service or organization]*. The demand must be made within a reasonable time after the Dispute has arisen. In no event may the demand for arbitration be made after the date when institution of legal or equitable proceedings based on such Dispute would be barred by the applicable statute of limitations.
2. All demands for arbitration and all answering statements thereto which include any monetary claims must contain a statement that the total sum or value in controversy as alleged by the party making such demand or answering statement is not more than \$\_\_\_\_\_ (exclusive of interest and costs). The arbitrators will not have jurisdiction, power, or authority to consider, or make findings (except in denial of their own jurisdiction) concerning any Dispute if the amount in controversy in such Dispute is more than \$\_\_\_\_\_ (exclusive of interest and costs), or to render a monetary award in response thereto against any party which totals more than \$\_\_\_\_\_ (exclusive of interest and costs). Disputes that are not subject to arbitration under this paragraph may be resolved in any court of competent jurisdiction.
3. The award rendered by the arbitrators shall be in writing, and shall include: (a) a precise breakdown of the award; and (b) a written explanation of the award specifically citing the Agreement provisions deemed applicable and relied on in making the award.
4. The award rendered by the arbitrators will be consistent with the Agreement of the parties and final, and judgment may be entered upon it in any court having jurisdiction thereof, and will not be subject to appeal or modification.

5. If a Dispute in question between Owner and Engineer involves the work of a Contractor, subcontractor, or consultants to the Owner or Engineer (each a “Joinable Party”), either Owner or Engineer may join each Joinable Party as a party to the arbitration between Owner and Engineer hereunder, and Engineer or Owner, as appropriate, shall include in each contract with each such Joinable Party a specific provision whereby such Joinable Party consents to being joined in an arbitration between Owner and Engineer involving the work of such Joinable Party. Nothing in this paragraph H.6.08.A.5 nor in the provision of such contract consenting to joinder shall create any claim, right, or cause of action in favor of the Joinable Party and against Owner or Engineer that does not otherwise exist.

Rural Development -- RUS Training Use Only



SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT I**, consisting of ges, referred to in and part of the **Agreement between Owner and gineer for Professional Services** dated \_\_\_\_\_.

Initial: \_\_\_\_\_  
Owner \_\_\_\_\_  
Owner's Consultant \_\_\_\_\_

**Special Provisions**

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Paragraph(s) \_\_\_\_\_ of the (is) (are) amended to include the following agreement(s) of the parties:

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SUGGESTED FORMAT  
(for use with E-510, 2002 Edition)

This is **EXHIBIT J**, consisting of  ges, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated \_\_\_\_\_.

**AMENDMENT TO OWNER-ENGINEER AGREEMENT**

**1. Background Data**

- a. Effective Date of Owner-Engineer Agreement:
- b. Owner:
- c. Engineer:
- d. Project:

**2. Nature of Amendment** *[Check those that are applicable and delete those that are inapplicable.]*

- ☐ Additional Services to be performed by Engineer
- ☐ Modifications to Services of Engineer
- ☐ Modifications to Responsibilities of Owner
- ☐ Modifications to Payment to Engineer
- ☐ Modifications to Time(s) for rendering Services
- ☐ Modifications to other terms and conditions of the Agreement

**3. Description of Modifications**

Attachment 1, "Modifications"

*[List other Attachments, if any]*

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is \_\_\_\_\_.

OWNER:

ENGINEER:

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Date Signed: \_\_\_\_\_

#### AGENCY CONCURRENCE

Agency: \_\_\_\_\_

By (Signature): \_\_\_\_\_

Typed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

This is **Attachment 1**, consisting of  ges, to Amendment No. \_\_\_\_\_, dated \_\_\_\_\_.

## Modifications

*[Include the following paragraphs that are appropriate and delete those not applicable to this amendment. Refer to paragraph numbers used in the Agreement or a previous amendment for clarity with respect to the modifications to be made. Use paragraph numbers in this document for ease of reference herein and in future correspondence or amendments.]*

1. Engineer shall perform the following Additional Services:
2. The Scope of Services currently authorized to be performed by Engineer in accordance with the Agreement and previous amendments, if any, is modified as follows:
3. The responsibilities of Owner are modified as follows:
4. For the additional Services or the modifications to services set forth above, Owner shall pay Engineer the following additional or modified compensation:
5. The schedule for rendering services is modified as follows:
6. Other portions of the Agreement (including previous amendments, if any) are modified as follows:

This Agreement has been prepared for use with the Standard General Conditions of the Construction Contract, Funding Agency Edition (No. C-710, 2002 Edition) of the Engineers Joint Contract Documents Committee. Their provisions are interrelated, and a change in one may necessitate a change in the other.

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1420 King Street, Alexandria, VA 22314-2794  
(703) 684-2882

American Consulting Engineers Council  
1015 15th Street N.W., Washington, DC 20005  
(202) 347-7474

American Society of Civil Engineers  
1801 Alexander Bell Drive, Reston, VA 20191-4400  
(800) 548-2723

# **SECTION 5.0**

## **Construction Contract Documents**

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## Construction Project Document List

The Rural Utilities Service (RUS) and the Engineers Joint Contract Documents Committee (EJCDC) have developed Funding Agency Editions of the Owner-Contractor Agreement and the General Conditions that when properly assembled with other Standard Edition construction related documents is acceptable for use as the foundation of the Construction Contract Documents on water and waste projects funded by RUS. These Funding Agency Edition documents are 2002 edition. The other forms referenced here are part of the EJCDC set of Construction Related Documents, Standard Edition. Therefore, these forms may require minor modifications before use with the Funding Agency Editions.

Because the EJCDC documents are fully integrated, when making a modification in one document you should ensure that appropriate modifications are made in all effected documents. It is the Rural Utilities Service (RUS) policy that the applicants use the EJCDC documents with minimal modification. However, RUS recognizes each project is unique and that modifications may be required to satisfy specific project requirements or State statutes that do not conflict with federal statutes or regulations.

Before applicants or consultants proceed with the development of a set of contract documents, they should contact the Rural Development State Office to verify they have the most current information specific to the type of project and State where the project is located.

It is customary that project signs identifying the Owner, Contractor, Engineer, and Funding Agencies be displayed during project construction. The sign requirements are not included in the Supplementary Conditions, but should be a part of the specifications prepared by the Engineer. These sign requirements vary by State. Therefore, the Engineer should contact the Rural Development State Engineer for the specific requirements in the State where the project will be constructed.

To eliminate unnecessary delays after Bid Opening, the full set of Construction Contract Documents must be submitted to Rural Development for review and acceptance before start of the Bidding or Negotiation process.

This table lists guidance documents and forms needed for compilation of a complete set of contract documents and RUS Notes on their use. **Documents listed under the “Use Form” column must be used to develop the contract documents, unless a formal request is made by the Engineer and approved by Rural Development.**

| Title or Source   | Use Document/Form                          | RUS Notes: Necessary actions, important points   |
|---|--|--|
| Advertisement   | RUS Bulletin 1780-26, Exhibit D            | <ul style="list-style-type: none"> <li>Use Exhibit D, <b>Advertisement for Bids</b></li> </ul>   |
| Instructions to Bidders for Construction Contracts<br><br>**USE IDAHO’S VERSION** | RUS Bulletin 1780-26, Exhibit E – Modified | <ul style="list-style-type: none"> <li>Use Exhibit E, <b>Instructions to Bidders</b>.</li> <li>One critical area that requires additional information is Article 14 - Basis of Bid, Evaluation of Bids. This information will vary whether bid is Lump Sum or Unit Price. If the Evaluation of Bids involves anything other than checking the contractor’s qualifications and calculation of unit prices, such as additive alternates, life-cycle costs, etc., the evaluation process must be clearly stated (given the bid documents, a third party would identify the same Successful Bidder as the Engineer) in the Instructions to Bidders.</li> </ul> |

| Title or Source  | Use Document/Form                          | RUS Notes: Necessary actions, important points   |
|--|--|--|
| Bid Form for Construction Contracts<br><br><b>**USE IDAHO'S VERSION**</b>  | RUS Bulletin 1780-26, Exhibit F - Modified | <ul style="list-style-type: none"> <li>• Use Exhibit F, <b>Bid Form</b>.</li> <li>• All procurement transactions, regardless of whether by sealed bids or by negotiation and without regard to dollar value, shall be conducted in a manner that provides maximum open and free competition. Procurement procedures shall not restrict or eliminate competition. Examples of what are considered to be restrictive of competition include, but are not limited to: placing unreasonable requirements on firms in order for them to qualify to do business; noncompetitive practices between firms; organizational conflicts of interest; specifying only a brand name product instead of either allowing an equal product to be offered, or describing the performance of the relevant requirements of the procurement; and unnecessary experience and bonding requirements</li> </ul> |
| Bid Bond   | EJCDC C-430 (02)                           | <ul style="list-style-type: none"> <li>• Must be at least 5% of Bid amount.</li> </ul>   |
| Notice of Award  | EJCDC C-510 (02)                           | <ul style="list-style-type: none"> <li>• Owner will not announce award of contract without consultation with Agency.</li> </ul>  |
| Suggested Form of Agreement Between Owner and Contractor (Stipulated Price) Funding Agency Edition<br><br><b>**Include Certificate of Owner's Attorney as last page of the agreement**</b> | EJCDC C-521 (02)                           | <ul style="list-style-type: none"> <li>• Read Introduction and Notes to User within document and make appropriate modifications.</li> <li>• 4.03, The amount entered for liquidated damages should cover all the Owner's additional costs for the project not being operational: interest, professional fees, administrative costs, etc. (see Exhibit B, item 16 of this bulletin).</li> <li>• 7.01, Interest rate comparable to short term lending rate or State law.</li> <li>• In addition to copies customarily provided for Owner, Contractor, Engineer, and others, two executed copies will be provided for Rural Development use.</li> <li>• Certificate of Owner's Attorney – General Conditions Exhibit GC-A, to be completed by Owner's attorney prior to submittal to Rural Development for concurrence in Agreement.</li> </ul>   |
| Standard General Conditions of the Construction Contract Funding Agency Edition  | EJCDC C-710 (02)                           | Includes: <ul style="list-style-type: none"> <li>• Federal Requirements – Article 18.</li> </ul>   |
| Supplementary Conditions<br><br><b>**USE IDAHO'S VERSION**</b>   | RUS Bulletin 1780-26, Exhibit G - Modified | <ul style="list-style-type: none"> <li>• Use Exhibit G, <b>Supplementary Conditions</b>.</li> <li>• Special attention should be focused on the types and amounts of insurance, and those to be listed as additional insureds under paragraph 5.04. These should be reviewed for each project in terms of the specific conditions associated with that project and the risks involved, and then the paragraphs in the Supplementary Conditions drafted accordingly. RUS does not support unfair allocation of risk or the burden of excessive insurance coverage.</li> </ul>  |
| Performance Bond   | EJCDC C-610 (02)                           | <ul style="list-style-type: none"> <li>• Must be full amount of Contract.</li> <li>• Surety must be listed in TC-570, have adequate bonding capacity, and be licensed to do business in the State where project is located.</li> </ul>   |
| Payment Bond   | EJCDC C-615 (02)                           | <ul style="list-style-type: none"> <li>• Must be full amount of Contract.</li> <li>• Surety must be listed in TC-570, have adequate bonding capacity, and be licensed to do business in the State where project is located.</li> </ul>   |

| Title or Source                       | Use Document/Form    | RUS Notes: Necessary actions, important points   |
|---------------------------------------|----------------------|--|
| Application for Payment               | EJCDC C-620 (02)     | <ul style="list-style-type: none"> <li>• Must retain signature blocks for Owner's Approval and Agency Concurrence. C-620 is pre-approved for use under 7 CFR 1780.76 (e).</li> <li>• It is anticipated that an attachment to the Application for Payment for the detailed tracking of quantities, materials stored, etc. will be developed by the Engineer and Contractor.</li> <li>• Work added by Change Order will not be considered for payment until Change Order has Agency Concurrence.</li> <li>• Quantity Completed on Final Application for Payment must equal final adjusted contract quantities on unit price contracts.</li> <li>• In addition to copies customarily provided for Owner, Contractor, Engineer, others, an executed copy with all attachments will be provided for Rural Development use.</li> </ul> |
| Change Order                          | EJCDC C-941 (02)     | <ul style="list-style-type: none"> <li>• Must retain signature block for Agency Concurrence. C-941 is pre-approved for use under 7 CFR 1780.76 (h) (2).</li> <li>• In addition to copies customarily provided for Owner, Contractor, Engineer, others, two executed copies will be provided for Rural Development use.</li> </ul>  |
| Record of Preconstruction Conference  | USDA Form RD 1924-16 | <ul style="list-style-type: none"> <li>• At a minimum, the conference must cover applicable items on this form.</li> </ul>   |
| Notice to Proceed                     | EJCDC C-550 (02)     | <ul style="list-style-type: none"> <li>• Executed copy will be provided to Rural Development.</li> </ul>   |
| Project Sign                          |                      | <ul style="list-style-type: none"> <li>• Every Rural Development project requires a project sign. Cost for project sign should be included in the contract price. An example of the project sign should be included in the contract documents. Several project sign formats have been provided in this manual.</li> </ul>  |
| Certificate of Substantial Completion | EJCDC C-625 (02)     | <ul style="list-style-type: none"> <li>• Executed copy will be provided to Rural Development.</li> </ul>   |
| Plans and Specifications              |                      | <ul style="list-style-type: none"> <li>• Submit to Rural Development, with Project Manual, for approval prior to advertising for bids.</li> </ul>  |

**\*All EJCDC documents submitted and used must be valid licensed copies.**

Any additions to the RUS Bulletins or EJCDC documents should follow the same format as the model document and each addition or deletion must be clearly identified.

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## Advertisement for Bids

Owner:

Address:

Separate sealed Bids for the construction of (briefly describe nature, scope, and major elements of the Work):

will be received by:

at the office of:

until \_\_\_\_\_, (Local Time) \_\_\_\_\_, and then at said office publicly opened and read aloud.

The Contract Documents may be examined at the following locations:

Copies of the Contract Documents may be obtained at the Issuing Office located at:

upon payment of \$ \_\_\_\_\_ for each set.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signed

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## **Instructions to Bidders**

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### **ARTICLE 1 - DEFINED TERMS**

- 1.01 Terms used in these Instructions to Bidders will have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. Issuing Office--The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

### **ARTICLE 2 - COPIES OF BIDDING DOCUMENTS**

- 2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement for Bids may be obtained from the Issuing Office. The deposit will be refunded to each document holder of record who returns a complete set of Bidding Documents in good condition within 30 days after opening of Bids.
- 2.02 Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

### **ARTICLE 3 - QUALIFICATIONS OF BIDDERS**

- 3.01 To demonstrate Bidder's qualifications to perform the Work, within five days of Owner's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below:

### **ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE**

#### **4.01 Subsurface and Physical Conditions**

A. The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Bidding Documents.
2. Those drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Bidding Documents.

- B. Copies of reports and drawings referenced in paragraph 4.01.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in paragraph 4.02 of the General Conditions has been identified and established in paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

#### **4.02 Underground Facilities**

- A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

#### **4.03 Hazardous Environmental Condition**

- A. The Supplementary Conditions identify those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that ENGINEER has used in preparing the Bidding Documents.
- B. Copies of reports and drawings referenced in paragraph 4.03.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in paragraph 4.06 of the General Conditions has been identified and established in paragraph 4.06 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

- 4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data



furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work appear in paragraph 4.06 of the General Conditions.

- 4.05 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.
- 4.06 Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of Contract Documents (other than portions thereof related to price) for such other work.
- 4.07 It is responsibility of each Bidder before submitting a Bid to:
- A. Examine and carefully study the Bidding Documents, the other related data identified in the Bidding Documents, and any Addenda;
  - B. Visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
  - C. Become familiar with and satisfy Bidder as to all Federal, State, and local Laws and Regulations that may affect cost, progress, or performance of the Work;
  - D. Carefully study all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions, and (2) reports and drawings of Hazardous Environmental Conditions at the Site which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions;
  - E. Obtain and carefully study (or accept consequences for not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;
  - F. Agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;
  - G. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
  - H. Correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;

- I. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
  - J. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.08 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

#### **ARTICLE 5 - PRE-BID CONFERENCE**

- 5.01 A pre-Bid conference will be held at \_\_\_\_\_ on \_\_\_\_\_ at \_\_\_\_\_. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

#### **ARTICLE 6 - SITE AND OTHER AREAS**

- 6.01 The Site is identified in the Bidding Documents. Easement for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

#### **ARTICLE 7 - INTERPRETATIONS AND ADDENDA**

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than five days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

## **ARTICLE 8 - BID SECURITY**

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 % of Bidder's maximum Bid price and in the form of a certified check or a Bid bond (EJCDC No. C-430, 2002 Edition) issued by a surety meeting the requirements of paragraphs 5.01 and 5.02 of the General Conditions.
- 8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.
- 8.03 Bid security of other Bidders whom OWNER believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

## **ARTICLE 9 - CONTRACT TIMES**

- 9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

## **ARTICLE 10 - LIQUIDATED DAMAGES**

- 10.01 Provisions for liquidated damages are set forth in the Agreement.

## **ARTICLE 11 - SUBSTITUTE AND "OR-EQUAL" ITEMS**

- 11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or "or-equal" materials and equipment as defined in paragraph 6.05 of the General Conditions, or those substitute materials and equipment approved by the Engineer and identified by Addendum. The materials and equipment described in the Bidding Documents establish a standard of required type, function and quality to be met by any proposed substitute or "or-equal" item. Request for Engineer's clarification of materials and equipment considered "or-equal" prior to the Effective Date of the Agreement must be received by the Engineer at least 5 days prior to the date for receipt of Bids. No item of material or equipment will be considered by Engineer as a substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each request shall conform to the requirements of paragraph 6.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon the Bidder. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any proposed substitute item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

## **ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS**

- 12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed

Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.

12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest responsible Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner and Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in paragraph 6.06 of the General Conditions.

12.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

12.04 The Contractor shall not award work to Subcontractor(s) in excess of the limits stated in SC 6.06.

### **ARTICLE 13 - PREPARATION OF BID**

13.01 The Bid form is included with the Bidding Documents. Additional copies may be obtained from Engineer.

13.02 All blanks on the Bid form shall be completed by printing in ink or by typewriter and the Bid signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternative, adjustment unit price item, and/or unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.

13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. If required by State where work is to be performed, the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporation business address and state of incorporation shall be provided on the Bid Form.

13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The business address of the partnership shall be provided on the Bid Form.

13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the business address of the firm must be provided on the Bid Form.

13.06 A Bid by an individual shall show the Bidder's name and business address.

13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid form. The business address of the joint venture must be provided on the Bid Form.

13.08 All names shall be typed or printed in ink below the signatures.

13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers and dates of which shall be filled in on the Bid form.

13.10 The address and telephone number for communication regarding the Bid shall be shown.

13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number for the state of the Project, if any, shall also be shown on the Bid Form.

## ARTICLE 14 - BASIS OF BID; COMPARISON OF BIDS

14.01 *(Select one of the following options by checking the box and completing any necessary information)*

☐ Lump Sum

- A. Bidders shall submit a Bid on a lump sum basis for the Bid and, for alternate bid items, include a separate price for each alternate described in the Bidding Documents as provided for in the Bid Form. The price for each alternate will be the amount added to the Bid if OWNER selects the alternate. OWNER reserves the right to award alternates in any order or combination. In comparison of Bids, the base bid and alternates will be evaluated in the following manner:

**OR**

☐ Unit Price

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.
- B. The total of all bid prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with paragraph 11.03 of the General Conditions.
- B. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- C. For alternate bid items, include a separate price for each alternate described in the Bidding Documents as provided for in the Bid Form. The price for each alternate will be the amount added to the Bid if OWNER selects the alternate. OWNER reserves the right to award alternates in any order or combination. In comparison of Bids, the base bid and alternates will be evaluated in the following manner:

## ARTICLE 15 - SUBMITTAL OF BID

15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and the Bid bond form. The unbound copy of the Bid Form is to be completed and submitted with all the attachments outlined in Article 7 of the Bid Form.

15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Advertisement for Bids and shall be enclosed in an opaque sealed envelope plainly marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." When using the mail or other delivery system, the Bidder is totally responsible for the mail or other delivery system delivering the Bid at the place and prior to the time indicated in the Advertisement for Bid. A mailed Bid shall be addressed to Owner at address in Article 1.01 of Bid Form.

## **ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID**

- 16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.
- 16.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid or negotiated, that Bidder will be disqualified from further bidding on the Work. This provision to withdraw a Bid without forfeiting the Bid security does not apply to Bidder's errors in judgment in preparing the Bid.

## **ARTICLE 17 - OPENING OF BIDS**

- 17.01 Bids will be opened at the time and place indicated in the Advertisement for Bids and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

## **ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE**

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form.

## **ARTICLE 19 - EVALUATION OF BIDS AND AWARD OF CONTRACT**

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to be non-responsible. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the contract Documents.
- 19.06 If the Contract is to be awarded, Owner will award the Contract to the responsible Bidder whose Bid, conforming with all the material terms and conditions of the Instructions to Bidders, is lowest, price and other factors considered.

## **ARTICLE 20 - CONTRACT SECURITY AND INSURANCE**

20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by such bonds.

## **ARTICLE 21 - SIGNING OF AGREEMENT**

21.01 When Owner gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

21.02 This Contract is expected to be funded in part with funds provided by the United States Department of Agriculture, Rural Utilities Service (RUS). Refer to Article 18 of the General Conditions for information on the Federal Requirements.

21.03 Concurrence by RUS in the award of the Contract is required before the Contract is effective.

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## Bid Form

Project Identification: \_\_\_\_\_

Contract Identification and Number: \_\_\_\_\_

### TABLE OF ARTICLES

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### ARTICLE 1 - BID RECIPIENT

- 1.01 This Bid Is Submitted To: \_\_\_\_\_
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in the Bid and in accordance with the other terms and conditions of the Bidding Documents.

### ARTICLE 2 - BIDDER'S ACKNOWLEDGMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Advertisement and Instructions to Bidders, including without limitations those dealing with the dispositions of Bid security. The Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

### ARTICLE 3 - BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
- A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

| Addendum No. | Addendum Date |
|--------------|---------------|
| _____        | _____         |
| _____        | _____         |
| _____        | _____         |

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

- C. Bidder is familiar with and is satisfied as to all Federal, State, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in SC-4.02, and (2) reports and drawings of a Hazard Environmental Condition, if any, which has been identified in SC-4.06.
- E. Bidder has obtained and carefully studied (or accepts the consequences for not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by the Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of the Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. Bidder will submit written evidence of its authority to do business in the State of Idaho not later than the date of its execution of the Agreement.

#### **ARTICLE 4 - FURTHER REPRESENTATIONS**

##### **4.01 Bidder further represents that:**

- A. This Bid is genuine and not made in the interest of or on the behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

**ARTICLE 5 - BASIS OF BID**

5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) shown on the attached bid sheet. (Engineer will determine and select the method below and insert bid schedule after this page, numbering it 3a, 3b, 3c.....):

☐

Lump Sum bid sheet is attached.

☐

Unit price bid sheet is attached and the following applies:

- A. Unit Prices have been computed in accordance with paragraph 11.03.A of the General Conditions.
- B. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the contract Documents.

## ARTICLE 6 - TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with paragraph 14.07.B of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the work within the Contract Times.

## ARTICLE 7 - ATTACHEMENTS TO THIS BID

- 7.01 The following documents are attached to and made a condition of the Bid:
- A. Required Bid security in the form of a ☐ Bid Bond (EJCDC C-430) or ☐ Certified Check (Check one);
- B.
- C.
- D.
- 7.02 For convenience the "Compliance Statement & Certification of Non-Segregated Facilities" (Form RD 400-6), "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions" (Form AD-1048), and RD Instruction 1940-Q, Exhibit A-1, "Certification for Contracts, Grants, and Loans" are included as part of this bid form (Note: Lower tier, means lower tier to the owner). By signing the bid form the bidder represents that (s)he is also signing the below documents as necessitated depending on the bid amount of the contract. If the base bid plus any additive alternates exceeds \$10,000, then Compliance Statement (RD 400-6) applies, section 7.02.A. If the base bid plus any additive alternates exceeds \$25,000, then Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions (AD-1048) also applies, section 7.02.B. If the base bid plus any additive alternates exceeds \$100,000, then RD Instruction 1940-Q, Exhibit A-1, Certification for Contracts, Grants, and Loans also applies, section 7.02.C.

### A. Compliance Statement

USDA Form Approved  
(Rev. 4-00)

COMPLIANCE STATEMENT

Form RD 400-6  
OMB No. 0575-0018

This statement relates to a proposed contract with :

who expects to finance the contract with assistance from either the Rural Housing Service (RHS), Rural Business-Cooperative Service (RBS), or the Rural Utilities Service (RUS) or their successor agencies, United States Department of Agriculture (whether by a loan, grant, loan insurance, guarantee, or other form of financial assistance). I am the undersigned bidder or prospective contractor, I represent that:

1. I ☐ have, ☐ have not, participated in a previous contract or subcontract subject to Executive 11246 (regarding equal employment opportunity) or a preceding similar Executive Order.
2. If I have participated in such a contract or subcontract, I ☐ have, ☐ have not, filed all compliance reports that have been required to file in connection with the contract or subcontract.

If the proposed contract is for \$50,000 or more and I have 50 or more employees, I also represent that:

3. I ☐ have, ☐ have not previously had contracts subject to the written affirmative action programs requirements of the Secretary of Labor.

4. If I have participated in such a contract or subcontract, I ☐ have, ☐ have not developed and placed on file at each establishment affirmative action programs as required by the rules and regulations of the Secretary of Labor.

I understand that if I have failed to file any compliance reports that have been required of me, I am not eligible and will not be eligible to have my bid considered or to enter into the proposed contract unless and until I make an arrangement regarding such reports that is satisfactory to either the RHS, RBS or RUS, or to the office where the reports are required to be filed.

I also certify that I do not maintain or provide for my employees any segregated facilities at any of my establishments, and that I do not permit my employees to perform their services at any location, under my control, where segregated facilities are maintained. I certify further that I will not maintain or provide for my employees any segregated facilities at any of my establishments, and that I will not permit my employees to perform their services at any location, under my control, where segregated facilities are maintained. I agree that a breach of this certification is a violation of the Equal Opportunity clause in my contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and wash rooms, restaurants and other eating areas time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. I further agree that (except where I have obtained identical certifications for proposed subcontractors for specific time periods) I will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that I will retain such certifications in my files; and that I will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods): (See Reverse).

#### NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS FOR CERTIFICATIONS OF NON-SEGREGATED FACILITIES

A certification of Nonsegregated Facilities, as required by the May 9, 1967, order (32F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e. quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

B. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions

U.S. DEPARTMENT OF AGRICULTURE

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY  
AND VOLUNTARY EXCLUSION - LOWER TIER COVERED TRANSACTIONS

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 7 CFR Part 3017, Section 3017.510, Participants' responsibilities. The regulations were published as Part IV of the January 30, 1989, Federal Register (pages 4722-4733). Copies of the regulations may be obtained by contacting the Department of Agriculture agency with which this transaction originated.

**Before signing the bid form, read instructions for Form AD-1048, available for download at:**

**<http://www.usda.gov/rus/water/ees/englib/pdf/usda1048.pdf>**

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

C. Certification for Contracts, Grants and Loans

RD Instruction 1940-Q

Exhibit A-1

CERTIFICATION FOR CONTRACTS, GRANTS AND LOANS

The bidder certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant or Federal loan, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant or loan.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant or loan, the undersigned shall complete and submit Standard Form - LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including contracts, subcontracts, and sub grants under grants and loans) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

### 7.03 Naming of Subcontractors

The sub-contractors to whom sub-contracts will be awarded if the bidder is awarded a contract are: (Insert “self” if properly licensed and so intended. Insert “Not required” if such specialty work is not required)

#### Plumbing Contractor

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor License Number: \_\_\_\_\_

#### Heating and Air Conditioning Contractor

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor License Number: \_\_\_\_\_

#### Electrical Contractor

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor License Number: \_\_\_\_\_

#### Other

Classification: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor License Number: \_\_\_\_\_

Classification: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor License Number: \_\_\_\_\_

(Note: If the owner is a City, County or School District, failure to name the plumbing, HVAC and electrical subcontractors may render the bid “non-responsive” under State Law IC 67-2310)

\*If additional subcontractors or suppliers need to be listed, list them on a separate page. (The pages should be numbered 7a, 7b...)

## ARTICLE 8 - DEFINED TERMS

8.01 The terms used in this Bid with the initial capital letters have the meanings indicated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

## ARTICLE 9 - BID SUBMITTAL

9.01 This Bid submitted by:

If Bidder is:

### **An Individual**

Name: \_\_\_\_\_

By: \_\_\_\_\_

*(Individual's signature)*

SEAL,  
if required  
by State

Doing business as: \_\_\_\_\_

### **A Partnership**

Partnership Name: \_\_\_\_\_

By: \_\_\_\_\_

*(Signature of general partner -- attach evidence of authority to sign)*

SEAL,  
if required  
by State

Name: \_\_\_\_\_

### **A Corporation**

Corporation Name: \_\_\_\_\_

State of Incorporation: \_\_\_\_\_

Type (General Business, Profession, Service, Limited Liability): \_\_\_\_\_

By: \_\_\_\_\_

*(Signature -- attach evidence of authority to sign)*

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Attest \_\_\_\_\_

*(Signature of Corporate Secretary)*

CORPORATE  
SEAL,  
if required by State

Date of Qualification to do business in Idaho \_\_\_\_\_



**A Joint Venture**

Name of Joint Venture: \_\_\_\_\_

First Joint Venture Name: \_\_\_\_\_

SEAL,  
if required  
by State

By: \_\_\_\_\_

*(Signature of joint venture partner -- attach evidence of authority to sign)*

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Second Joint Venture Name: \_\_\_\_\_

SEAL,  
if required  
by State

By: \_\_\_\_\_

*(Signature of joint venture partner -- attach evidence of authority to sign)*

Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is party to the venture should be in the manner indicated above.)

---

Bidder's Business address: \_\_\_\_\_

\_\_\_\_\_

Business Phone No.: \_\_\_\_\_

Business FAX No.: \_\_\_\_\_

Business E-Mail Address: \_\_\_\_\_

State Contractor License No (If applicable): \_\_\_\_\_

Employer's Tax ID No.: \_\_\_\_\_

Phone and FAX Numbers, and Address for receipt of official communications, if different from Business contact information:

9.02 Bid submitted on \_\_\_\_\_ .

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**BID BOND**

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

BIDDER (Name and Address): \_\_\_\_\_

SURETY (Name and Address of Principal Place of Business): \_\_\_\_\_

OWNER (Name and Address): \_\_\_\_\_

**BID**

Bid Due Date: \_\_\_\_\_

Project (Brief Description Including Location): \_\_\_\_\_

**BOND**

Bond Number: \_\_\_\_\_

Date (Not later than Bid due date): \_\_\_\_\_

Penal sum \_\_\_\_\_

(Words)

(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

**BIDDER****SURETY**

(Seal  
)

(Seal)

\_\_\_\_\_  
Bidder's Name and Corporate Seal

\_\_\_\_\_  
Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

Note: Above addresses are to be used for giving required notice.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2. All Bids are rejected by Owner, or
  - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

# Notice of Award

Dated \_\_\_\_\_

|   |                         |                       |
|---|-------------------------|-----------------------|
| Project:  | Owner:                  | Owner's Contract No.: |
| Contract:   | Engineer's Project No.: |                       |
| Bidder:   |                         |                       |
| Bidder's Address: (send Certified Mail, Return Receipt Requested) |                         |                       |
|   |                         |                       |
|   |                         |                       |
|   |                         |                       |

You are notified that your Bid dated \_\_\_\_\_ for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for \_\_\_\_\_

\_\_\_\_\_

(Indicate total Work, alternates or sections or Work awarded.)

The Contract Price of your Contract is \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

*(Insert appropriate data if Unit Prices are used. Change language for Cost-Plus contracts.)*

\_\_\_\_\_ copies of each of the proposed Contract Documents (except Drawings) accompany this Notice of Award.  
\_\_\_\_\_ sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within [15] days of the date you receive this Notice of Award.

1. Deliver to the Owner [\_\_\_\_\_] fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract security [Bonds] as specified in the Instructions to Bidders (Article 20), [and] General Conditions (Paragraph 5.01) [and Supplementary Conditions (Paragraph SC-5.01).]
3. Other conditions precedent:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

\_\_\_\_\_  
Owner  
By: \_\_\_\_\_  
Authorized Signature  
\_\_\_\_\_  
Title

Copy to Engineer

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This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

**SUGGESTED FORM OF AGREEMENT  
BETWEEN OWNER AND CONTRACTOR FOR  
CONSTRUCTION CONTRACT (STIPULATED PRICE)  
FUNDING AGENCY EDITION**

*Prepared by*

**ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE**

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE  
*a practice division of the*  
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

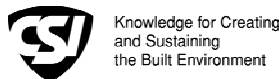
This document has been approved and endorsed by

The Associated General Contractors of America



and the

Construction Specification Institute



This document has been accepted by  
United States Department of Agriculture  
Rural Utilities Service, Water and Waste Programs

This Suggested Form of Agreement has been prepared for use with the Standard General Conditions of the Construction Contract, Funding Agency Edition (No. C-710, 2002 Edition). Their provisions are interrelated, and a change in one may necessitate a change in the other. The language contained in the Suggested Instructions to Bidders (No. C-200, 2002 Edition) is also carefully interrelated with the language of this Agreement. Their usage is discussed in the Commentary on EJCDC Construction Documents. See also Guide to the Preparation of Supplementary Conditions (No. C-800, 2002 Edition).

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1015 15th Street N.W., Washington, DC 20005  
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American Society of Civil Engineers  
1801 Alexander Bell Drive, Reston, VA 20191-4400  
(800) 548-2723



## INTRODUCTION

This Suggested Form of Agreement between Owner and Contractor for Construction Contract, Funding Agency Edition (Stipulated Price) (“Agreement”) has been prepared for use with the Guide to the Preparation of Instructions to Bidders (“Instructions”)(C-200, 2002 Edition) and with the Standard General Conditions of the Construction Contract, Funding Agency Edition (“General Conditions”)(C-710, 2002 Edition). Their provisions are interrelated, and a change in one may necessitate a change in the others. For guidance in the preparation of Supplementary Conditions and coordination with Instructions to Bidders, see Guide to the Preparation of Supplementary Conditions (“Supplementary Conditions”)(C-800, 2002 Edition). See also Suggested Bid Form (“Bid Form”) (C-410, 2002 Edition). The EJCDC has not prepared a suggested form of Advertisement or Invitation to Bid because such documents will vary widely to conform to statutory requirements.

This form and the other Bidding Documents prepared and issued by the EJCDC assume acceptance of the Project Manual concept of the Construction Specifications Institute which provides for an organizational format for location of all bound documentary information for a construction project, namely: Bidding Requirements (which term refers to the Advertisement or Invitation to Bid, the Instructions, and any Bid Form that may be suggested or prescribed, all of which provide information and guidance for all Bidders) and the Contract Documents (defined in Article 1 of the General Conditions), which include the Agreement, bonds and certificates, the General Conditions, the Supplementary Conditions, the Drawings, and the Specifications. The Bidding Requirements are not considered part of the Contract Documents because much of their substance pertains to the relationships prior to the award of the Contract and has little effect or impact thereafter and because many contracts are awarded without going through the bidding process. In some cases, however, the actual Bid may be attached as an exhibit to the Agreement to avoid extensive retyping. (The terms “Bidding Documents” and “Bidding Requirements” are defined in Article 1 of the General Conditions.) The Project Manual concept is explained in the Manual of Practice issued by the Construction Specifications Institute.

Suggested language is presented herein with “Notes to User” to assist in preparing the Agreement. Much of the language should be usable on most projects, but modifications and additional provisions will often be necessary. The suggested language has been coordinated with the other standard forms produced by the EJCDC. When modifying the suggested language or writing additional provisions, the user must check the other documents thoroughly for conflicts and coordination of language usage and make appropriate revisions in all affected documents.

Refer to the discussions in EJCDC’s Recommended Competitive Bidding Procedures for Construction Projects (“Bidding Procedures”)(No. 1910-9-D, 1987 Edition) on the particular paragraphs of which frequent reference is made below. For brevity, referenced paragraphs of the Instructions to Bidders are referenced with the prefix “I,” those of the Bid Form are referenced with the prefix “BF,” and those of this Agreement are referenced with the prefix “A.”

### NOTES:

1. EJCDC publications may be ordered from:

NSPE headquarters  
1420 King Street  
Alexandria VA 22314-2715  
(703) 684-2800  
[www.nspe.org](http://www.nspe.org)

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Reston, VA 20191-4400  
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1015 15th Street NW  
Washington DC 20005  
(202) 347-7474  
[www.acec.org](http://www.acec.org)

2. CSI publications may be obtained from:

CSI  
99 Canal Center Plaza, Suite 300  
Alexandria, VA 22314  
(703) 684-0300  
[www.csinet.org](http://www.csinet.org)

**SUGGESTED FORM OF AGREEMENT  
BETWEEN OWNER AND CONTRACTOR  
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)  
FUNDING AGENCY EDITION**

THIS AGREEMENT is by and between \_\_\_\_\_ (“Owner”) and  
\_\_\_\_\_ (“Contractor”).

Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

**ARTICLE 1 – WORK**

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

**ARTICLE 2 – THE PROJECT**

- 2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

**ARTICLE 3 – ENGINEER**

- 3.01 The Project has been designed by \_\_\_\_\_ (Engineer), who is to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

**ARTICLE 4 – CONTRACT TIMES**

4.01 *Time of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Days to Achieve Substantial Completion and Final Payment*

- A. The Work will be substantially completed within \_\_\_\_\_ days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within \_\_\_\_\_ days after the date when the Contract Times commence to run.

**NOTE(S) TO USER**

*When it is customary to have just one Contract Time – For Substantial Completion, the last three words of the heading, the letter “s” on Times and the text following the first usage of the term General Conditions should be deleted in this paragraph and the last sentence should be deleted from Paragraph 4.03. If such deletions are made, it may require a change in GC 1.01.A.15 and GC 12.02-12.05.*

#### 4.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$\_\_\_\_\_ for each day that expires after the time specified in Paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$\_\_\_\_\_ for each day that expires after the time specified in Paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

#### NOTE(S) TO USER

*Where failure to reach a Milestone on time is of such consequence that the assessment of liquidated damages for failure to reach one or more Milestones on time is to be provided, appropriate amending or supplementing language should be inserted here.*

#### ARTICLE 5 – CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01.A, 5.01.B, and 5.01.C below:

- A. For all Work other than Unit Price Work, a Lump Sum of:

\_\_\_\_\_ (\$\_\_\_\_\_) (words) (figure)

All specific cash allowances are included in the above price and have been computed in accordance with paragraph 11.02 of the General Conditions.

- B. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in this paragraph 5.01.B:

As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in Paragraph 11.03 of the General Conditions.

#### UNIT PRICE WORK

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> | <u>Estimated Quantity</u> | <u>Unit Price</u> | <u>Total Estimated Price</u> |
|-----------------|--------------------|-------------|---------------------------|-------------------|------------------------------|
|-----------------|--------------------|-------------|---------------------------|-------------------|------------------------------|

ESTIMATED TOTAL OF ALL UNIT PRICE WORK \$ \_\_\_\_\_ \$(\_\_\_\_\_) (use words) (figure)

- C. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

**NOTE(S) TO USER**

*If adjustment prices for variations from stipulated Base Bid quantities have been agreed to, insert appropriate provisions. See BF-4.*

*Depending upon the particular Bid Form used, use A-5.01.A alone, A-5.01.A and A-5.01.B together, A-5.01.B alone, or A-5.01.C alone, deleting those not used and renumbering accordingly. If A-5.01.C is used, Contractor's Bid is attached as an exhibit and listed in A-9.*

**ARTICLE 6 – PAYMENT PROCEDURES**

**6.01 Submittal and Processing of Payments**

- A. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

**6.02 Progress Payments; Retainage**

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the \_\_\_\_ day of each month during performance of the Work as provided in Paragraphs 6.02.A.1 and 6.02.A.2 below. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements:
1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions:
    - a. 95 percent of Work completed (with the balance being retainage); and
    - b. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
  2. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions.

**6.03 Final Payment**

- A. Upon receipt of the final Application for Payment accompanied by Engineer's recommendation of payment in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay Contractor as provided in Paragraph 14.07 of the General Conditions the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages.

## ARTICLE 7 – INTEREST

- 7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the maximum legal rate.

## ARTICLE 8 – CONTRACTOR’S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Agreement Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
  - B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  - C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
  - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in Paragraph 4.02 of the General Conditions and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which has been identified in the Supplementary Conditions as provided in Paragraph 4.06 of the General Conditions.

### NOTE(S) TO USER

*If the reports and/or drawings referred to in A-8.01.D do not exist, either modify A-8.01.D or delete A-8.01.D and renumber accordingly.*

- E. Contractor has obtained and carefully studied (or assumes responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto.

### NOTE(S) TO USER

*If the reports and/or drawings referred to in A-8.01.D do not exist, delete the phrase “additional or supplementary” in the first sentence of A-8.01.E.*


- F. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- I. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

- J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

## ARTICLE 9 – CONTRACT DOCUMENTS

### 9.01 Contents

A. The Contract Documents consist of the following:

1. This Agreement (pages 1 to , inclusive).
2. Performance bond (pages \_\_\_\_ to \_\_\_\_, inclusive).
3. Payment bond (pages \_\_\_\_ to \_\_\_\_, inclusive).
4. Other bonds (pages \_\_\_\_ to \_\_\_\_, inclusive).
  - a. \_\_\_\_ (pages \_\_\_\_ to \_\_\_\_, inclusive).
  - b. \_\_\_\_ (pages \_\_\_\_ to \_\_\_\_, inclusive).
  - c. \_\_\_\_ (pages \_\_\_\_ to \_\_\_\_, inclusive).
5. General Conditions (pages \_\_\_\_ to \_\_\_\_, inclusive).
6. Supplementary Conditions (pages \_\_\_\_ to \_\_\_\_, inclusive).
7. Specifications as listed in the table of contents of the Project Manual.
8. Drawings consisting of \_\_\_\_ sheets with each sheet bearing the following general title: \_\_\_\_.
9. Addenda (numbers \_\_\_\_ to \_\_\_\_, inclusive).
10. Exhibits to this Agreement (enumerated as follows):
  - a. Contractor's Bid (pages \_\_\_\_ to \_\_\_\_, inclusive).
  - b. Documentation submitted by Contractor prior to Notice of Award (pages \_\_\_\_ to \_\_\_\_, inclusive).
  - c. \_\_\_\_.
11. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
  - a. Notice to Proceed (pages \_\_\_\_ to \_\_\_\_, inclusive).
  - b. Work Change Directives.
  - c. Change Order(s).

B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 9.

- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

## ARTICLE 10 – MISCELLANEOUS

### 10.01 *Terms*

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

### 10.02 *Assignment of Contract*

- A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

### 10.03 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

### 10.04 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

### 10.05 *Other Provisions*

#### *NOTE(S) TO USER*

*If Owner intends to assign a procurement contract (for goods and services) to the Contractor, see Notes to User at Article 23 of Suggested Instructions to Bidders for Procurement Contracts (EJCDC No. P-200, 2000 Edition) for provisions to be inserted in this Article.*

*Insert other provisions here if applicable.*

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in four copies. One counterpart each has been delivered to Owner, Contractor, Engineer, and Agency. All portions of the Contract Documents have been signed, initialed, or identified by Owner and Contractor or identified by Engineer on their behalf.

*NOTE(S) TO USER*

*See I-21 and correlate procedures for format and signing between the two documents.*

This Agreement is dated \_\_\_\_\_. This Agreement shall not be effective unless and until Agency's designated representative concurs.

OWNER:

CONTRACTOR

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

[CORPORATE SEAL]

[CORPORATE SEAL]

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Address for giving notices:

Address for giving notices:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Agent for service of process:

\_\_\_\_\_

(If Contractor is a corporation or a partnership, attach evidence of authority to sign.)

Agency Concurrence:

As lender or insurer of funds to defray the costs of this Contract, and without liability for any payments thereunder, the Agency hereby concurs in the form, content, and execution of this Agreement.

Agency: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_



**EXHIBIT GC-A**  
Certificate of Owner's Attorney

I, the undersigned, \_\_\_\_\_, the duly authorized and acting legal representative of \_\_\_\_\_, do hereby certify as follows:

I have examined the attached Contract(s) and performance and payment bond(s) and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements is adequate and has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions, and provisions thereof.

\_\_\_\_\_  
Signature

Date: \_\_\_\_\_

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This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT FUNDING AGENCY EDITION

*Prepared by*

**ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE**

and

Issued and Published Jointly By



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This document has been approved and endorsed by

The Associated General Contractors of America



and the

Construction Specification Institute



These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Funding Agency Edition No. C-521 (2002 Edition). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001, 2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800, 2002 Edition).

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# GENERAL CONDITIONS

## ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda* – Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agency* – The Federal or state agency named as such in the Agreement.
  3. *Agreement* – The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
  4. *Application for Payment* – The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  5. *Asbestos* – Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
  6. *Bid* – The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  7. *Bidder* – The individual or entity who submits a Bid directly to Owner.
  8. *Bidding Documents* – The Bidding Requirements and the proposed Contract Documents (including all Addenda).
  9. *Bidding Requirements* – The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.
  10. *Change Order* – A document recommended by Engineer which is signed by Contractor and Owner and Agency and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
  11. *Claim* – A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
  12. *Contract* – The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
  13. *Contract Documents* – Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's

submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

14. *Contract Price* – The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
15. *Contract Times* – The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
16. *Contractor* – The individual or entity with whom Owner has entered into the Agreement.
17. *Cost of the Work* – See Paragraph 11.01.A for definition.
18. *Drawings* – That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
19. *Effective Date of the Agreement* – The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
20. *Engineer* – The individual or entity named as such in the Agreement.
21. *Field Order* – A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
22. *General Requirements* – Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
23. *Hazardous Environmental Condition* – The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
24. *Hazardous Waste* – The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
25. *Laws and Regulations; Laws or Regulations* – Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens* – Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
27. *Milestone* – A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
28. *Notice of Award* – The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
29. *Notice to Proceed* – A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

30. *Owner* – The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
31. *PCBs* – Polychlorinated biphenyls.
32. *Petroleum* – Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
33. *Progress Schedule* – A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
34. *Project* – The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
35. *Project Manual* – The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
36. *Radioactive Material* – Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
37. *Related Entity* – An officer, director, partner, employee, agent, consultant, or subcontractor.
38. *Resident Project Representative* – The authorized representative of Engineer who may be assigned to the Site or any part thereof.
39. *Samples* – Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
40. *Schedule of Submittals* – A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
41. *Schedule of Values* – A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
42. *Shop Drawings* – All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
43. *Site* – Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
44. *Specifications* – That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
45. *Subcontractor* – An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

- 46. *Substantial Completion* – The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
- 47. *Successful Bidder* – The Bidder submitting a responsive Bid to whom Owner makes an award.
- 48. *Supplementary Conditions* – That part of the Contract Documents which amends or supplements these General Conditions.
- 49. *Supplier* – A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.
- 50. *Underground Facilities* – All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 51. *Unit Price Work* – Work to be paid for on the basis of unit prices.
- 52. *Work* – The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 53. *Work Change Directive* – A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and Agency upon recommendation of the Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

## 1.02 Terminology

- A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.
- B. *Intent of Certain Terms or Adjectives*
  - 1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered”, “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. *Day*

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
  - a. does not conform to the Contract Documents, or
  - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
  - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. *Furnish, Install, Perform, Provide*

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.

- F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## **ARTICLE 2 – PRELIMINARY MATTERS**

### **2.01     *Delivery of Bonds and Evidence of Insurance***

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

### **2.02     *Copies of Documents***

- A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement.

2.04 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:
  - 1. a preliminary Progress Schedule;
  - 2. a preliminary Schedule of Submittals; and
  - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, Agency, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
  - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
  - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
  - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

## ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

### 3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.
- C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

### 3.02 *Reference Standards*

- A. *Standards, Specifications, Codes, Laws, and Regulations*
  - 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
  - 2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

### 3.03 *Reporting and Resolving Discrepancies*

- A. Reporting Discrepancies
  - 1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
  - 2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
  - 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.
- B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
  - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
  - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
  1. A Field Order;
  2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3) or
  3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

- A. Contractor and any Subcontractor or Supplier shall not:
  1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
  2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.
- B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

- A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.



- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

#### **ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS**

##### **4.01     *Availability of Lands***

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

##### **4.02     *Subsurface and Physical Conditions***

- A. *Reports and Drawings:* The Supplementary Conditions identify:
  - 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
  - 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.
- B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
  - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
  - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
  - 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

#### 4.03 *Differing Subsurface or Physical Conditions*

- A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
1. is of such a nature as to establish that any “technical data” on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
  2. is of such a nature as to require a change in the Contract Documents; or
  3. differs materially from that shown or indicated in the Contract Documents; or
  4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

- B. *Engineer’s Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner’s obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer’s findings and conclusions.

C. *Possible Price and Times Adjustments*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor’s cost of, or time required for, performance of the Work; subject, however, to the following:
  - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
  - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
  - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
  - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor’s making such final commitment; or
  - c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of

engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

#### 4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
  - a. reviewing and checking all such information and data,
  - b. locating all Underground Facilities shown or indicated in the Contract Documents,
  - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
  - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because

of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

- A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.
- B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Supplementary Conditions. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
1. the completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
  2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  3. any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.
- F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner’s own forces or others in accordance with Article 7.

- G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

## **ARTICLE 5 – BONDS AND INSURANCE**

### **5.01     *Performance, Payment, and Other Bonds***

- A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.
- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.
- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

### **5.02     *Licensed Sureties and Insurers***

- A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

- A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.
- B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

- A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
  - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
  - 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
  - 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
  - 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
    - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
    - b. by any other person for any other reason;
  - 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
  - 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
  - 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
  - 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
  - 3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.
  - a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

#### 5.05 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

#### 5.06 *Property Insurance*

- A. Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (Contractor shall be responsible for any deductible or self-insured retention.). This insurance shall:
  1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;
  2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
  3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
  4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
  5. allow for partial utilization of the Work by Owner;
  6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. Contractor shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

#### 5.07 *Waiver of Rights*

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Contractor as trustee or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:
  1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
  2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.



- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Contractor and made payable to Contractor as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Contractor shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof.
- B. Contractor as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Contractor's exercise of this power. If such objection be made, Contractor as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Contractor as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Contractor as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

- A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

- A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

**ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES**

6.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the

design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

#### 6.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

#### 6.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 6.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.
  - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
  - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

#### 6.05 *Substitutes and "Or-Equals"*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to

establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or “or-equal” item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *“Or-Equal” Items:* If in Engineer’s sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an “or-equal” item, in which case review and approval of the proposed item may, in Engineer’s sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

- a. in the exercise of reasonable judgment Engineer determines that:

- 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
- 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
- 3) it has a proven record of performance and availability of responsive service; and

- b. Contractor certifies that, if approved and incorporated into the Work:

- 1) there will be no increase in cost to the Owner or increase in Contract Times, and
- 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. **Substitute Items**

- a. If in Engineer’s sole discretion an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The procedure requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
  - 1) shall certify that the proposed substitute item will:
    - a) will perform adequately the functions and achieve the results called for by the general design,
    - b) be similar in substance to that specified, and
    - c) be suited to the same use as that specified;

- 2) will state:
  - a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;
  - b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
  - c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
- 3) will identify:
  - a) all variations of the proposed substitute item from that specified, and
  - b) available engineering, sales, maintenance, repair, and replacement services;
- 4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.

- B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. *Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.
- D. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- E. *Engineer's Cost Reimbursement:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- F. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

#### 6.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner

may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.
- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
  - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor
  - 2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

- A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

## 6.11 *Use of Site and Other Areas*

### A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work, Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

## 6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

## 6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;
2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

- A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. *Shop Drawings*

- a. Submit number of copies specified in the General Requirements.



- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.
- 2. *Samples*
  - a. Submit number of Samples specified in the Specifications.
  - b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.
- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Submittal Procedures*
  - 1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:
    - a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
    - b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
    - c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and
    - d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.
  - 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
  - 3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.
- D. *Engineer's Review*
  - 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
  - 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs

incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

**E. *Resubmittal Procedures***

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

**6.18 *Continuing the Work***

- A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

**6.19 *Contractor's General Warranty and Guarantee***

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
  1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
  2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
  1. observations by Engineer;
  2. recommendation by Engineer or payment by Owner of any progress or final payment;
  3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
  4. use or occupancy of the Work or any part thereof by Owner;
  5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
  6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:
  - 1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and

other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

## **ARTICLE 7 – OTHER WORK AT THE SITE**

### **7.01     *Related Work at Site***

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
  - 1. written notice thereof will be given to Contractor prior to starting any such other work; and
  - 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

### **7.02     *Coordination***

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
  - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
  - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
  - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

**ARTICLE 8 – OWNER'S RESPONSIBILITIES**

8.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

- A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

- A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

- A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

- A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

- A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

**ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION**

9.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

- A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities

and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

- A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

- A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.
- B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

**ARTICLE 10 – CHANGES IN THE WORK; CLAIMS**

10.01 *Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, subject to written approval by Agency at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.



#### 10.03 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
  2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
  3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

#### 10.04 *Notification to Surety*

- A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

#### 10.05 *Claims*

- A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).
- C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
1. deny the Claim in whole or in part,
  2. approve the Claim, or
  3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

## **ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

### **11.01    *Cost of the Work***

- A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.
  - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
  - 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
  - 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
  - 4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
  - 5. Supplemental costs including the following:
    - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
- c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressages, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of

defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.
- C. **Contractor's Fee:** When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. **Documentation:** Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

#### 11.02 *Allowances*

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. **Cash Allowances**
  1. Contractor agrees that:
    - a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
    - b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. **Contingency Allowance**
  1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

#### 11.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
  - 1. the Bid price of a particular item of Unit Price Work amounts to more than 5 percent of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
  - 2. there is no corresponding adjustment with respect to any other item of Work; and
  - 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

## **ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES**

### **12.01    *Change of Contract Price***

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
  - 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
  - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
  - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. Contractor's Fee: The Contractor's fee for overhead and profit shall be determined as follows:
  - 1. a mutually acceptable fixed fee; or
  - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
    - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
    - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor

under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

- d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

#### 12.02 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

#### 12.03 *Delays*

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.B.
  - 1. delays caused by or within the control of Contractor; or
- D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

## **ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

### **13.01    *Notice of Defects***

- A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

### **13.02    *Access to Work***

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

### **13.03    *Tests and Inspections***

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
  - 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
  - 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and
  - 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

#### 13.04 *Uncovering Work*

- A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
- C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 13.05 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 13.06 *Correction or Removal of Defective Work*

- A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

#### 13.07 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
  - 1. repair such defective land or areas; or



2. correct such defective Work; or
  3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
  4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site,

take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

- C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

#### **ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION**

##### **14.01    *Schedule of Values***

- A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

##### **14.02    *Progress Payments***

###### **A.    *Applications for Payments***

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

###### **B.    *Review of Applications***

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor

indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
  - a. the Work has progressed to the point indicated;
  - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and
  - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
  - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
  - b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
  - a. to supervise, direct, or control the Work, or
  - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
  - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
  - d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
  - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
  - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
  - b. the Contract Price has been reduced by Change Orders;

- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

**C. *Payment Becomes Due***

- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

**D. *Reduction in Payment***

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
  - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
  - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
  - c. the Contractor's performance or furnishing of the Work is inconsistent with funding Agency requirements;
  - d. there are other items entitling Owner to a set-off against the amount recommended; or
  - e. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.
- 3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

**14.03 *Contractor's Warranty of Title***

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

**14.04 *Substantial Completion***

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner, Agency, Contractor, and Engineer shall make a prefinal inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.
- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

#### 14.05 *Partial Utilization*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.
  - 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  - 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
  - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

#### 14.06 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner, Agency, and Contractor and will notify Contractor in writing of all

particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.07 *Final Payment*

##### *A. Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
  - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
  - b. consent of the surety, if any, to final payment;
  - c. a list of all Claims against Owner that Contractor believes are unsettled; and
  - d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

##### *B. Engineer's Review of Application and Acceptance*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

##### *C. Payment Becomes Due*

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

- A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims. The remaining balance of any sum included in the final Application for Payment but held by OWNER for Work not fully completed and accepted will become due when the Work is fully completed and accepted.

14.09 *Waiver of Claims*

- A. The making and acceptance of final payment will constitute:
1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
  2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

**ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION**

15.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will justify termination for cause:
1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
  2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
  3. Contractor's disregard of the authority of Engineer; or
  4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),
  2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and
  3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

**15.03    *Owner May Terminate For Convenience***

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
  3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
  4. reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.



#### 15.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

### **ARTICLE 16 – DISPUTE RESOLUTION**

#### 16.01 *Methods and Procedures*

- A. Owner and Contractor may mutually request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association. Timely submission of the request shall stay the effect of Paragraph 10.05.E.
- B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:
  - 1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or
  - 2. agrees with the other party to submit the Claim to another dispute resolution process, or
  - 3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

### **ARTICLE 17 – MISCELLANEOUS**

#### 17.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
  - 1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or
  - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

- A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

**ARTICLE 18 – FEDERAL REQUIREMENTS**

18.01 *Agency Not a Party*

- A. This Contract is expected to be funded in part with funds provided by Agency. Neither Agency, nor any of its departments, entities, or employees is a party to this Contract.

18.02 *Contract Approval*

- A. Owner and Contractor will furnish Owner's attorney such evidence as required so that Owner's attorney can complete and execute the following "Certificate of Owner's Attorney" (Exhibit GC-A) before Owner submits the executed Contract Documents to Agency for approval.
- B. Concurrence by Agency in the award of the Contract is required before the Contract is effective.

18.03 *Conflict of Interest*

- A. Contractor may not knowingly contract with a supplier or manufacturer if the individual or entity who prepared the plans and specifications has a corporate or financial affiliation with the supplier or manufacturer.
- B. Owner's officers, employees, or agents shall not engage in the award or administration of this Contract if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when: (i) the employee,

officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest in Contractor. Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from Contractor or subcontractors.

#### 18.04 *Gratuities*

- A. If Owner finds after a notice and hearing that Contractor, or any of Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of Owner or Agency in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, Owner may, by written notice to Contractor, terminate this Contract. Owner may also pursue other rights and remedies that the law or this Contract provides. However, the existence of the facts on which Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.
- B. In the event this Contract is terminated as provided in paragraph 18.04.A, Owner may pursue the same remedies against Contractor as it could pursue in the event of a breach of this Contract by Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, Owner may pursue exemplary damages in an amount (as determined by Owner) which shall not be less than three nor more than ten times the costs Contractor incurs in providing any such gratuities to any such officer or employee.

#### 18.05 *Audit and Access to Records*

- A. For all negotiated contracts and negotiated modifications (except those of \$10,000 or less), Owner, Agency, the Comptroller General, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the Contractor, which are pertinent to the Contract, for the purpose of making audits, examinations, excerpts and transcriptions. Contractor shall maintain all required records for three years after final payment is made and all other pending matters are closed.

#### 18.06 *Small, Minority and Women's Businesses*

- A. If Contractor intends to let any subcontracts for a portion of the work, Contractor shall take affirmative steps to assure that small, minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services. Affirmative steps shall consist of: (1) including qualified small, minority and women's businesses on solicitation lists; (2) assuring that small, minority and women's businesses are solicited whenever they are potential sources; (3) dividing total requirements when economically feasible, into small tasks or quantities to permit maximum participation of small, minority, and women's businesses; (4) establishing delivery schedules, where the requirements of the work permit, which will encourage participation by small, minority and women's businesses; (5) using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the U.S. Department of Commerce; (6) requiring each party to a subcontract to take the affirmative steps of this section; and (7) Contractor is encouraged to procure goods and services from labor surplus area firms.

#### 18.07 *Anti-Kickback*

- A. Contractor shall comply with the Copeland Anti-Kickback Act (18 USC 874 and 40 USC 276c) as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States"). The Act provides that Contractor or subcontractor shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public facilities, to give up any part of the compensation to which they are otherwise entitled. Owner shall report all suspected or reported violations to Agency.

18.08 *Clean Air and Pollution Control Acts*

- A. If this Contract exceeds \$100,000, Contractor shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 USC 7401 *et seq.*) and the Federal Water Pollution Control Act as amended (33 USC 1251 *et seq.*). Contractor will report violations to the Agency and the Regional Office of the EPA.

18.09 *State Energy Policy*

- A. Contractor shall comply with the Energy Policy and Conservation Act (P.L. 94-163). Mandatory standards and policies relating to energy efficiency, contained in any applicable State Energy Conservation Plan, shall be utilized.

18.10 *Equal Opportunity Requirements*

- A. If this Contract exceeds \$10,000, Contractor shall comply with Executive Order 11246, "Equal Employment Opportunity," as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."
- B. Contractor's compliance with Executive Order 11246 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative active obligations required by the Standard Federal Equal Employment Opportunity Construction Contract Specifications, as set forth in 41 CFR Part 60-4 and its efforts to meet the goals established for the geographical area where the Contract is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract, and in each trade, and Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting Contractor's goals shall be a violation of the Contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.
- C. Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the Contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the Contract is to be performed.

18.11 *Restrictions on Lobbying*

- A. Contractor and each subcontractor shall comply with Restrictions on Lobbying (Public Law 101-121, Section 319) as supplemented by applicable Agency regulations. This Law applies to the recipients of contracts and subcontracts that exceed \$100,000 at any tier under a Federal loan that exceeds \$150,000 or a Federal grant that exceeds \$100,000. If applicable, Contractor must complete a certification form on lobbying activities related to a specific Federal loan or grant that is a funding source for this Contract. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 USC 1352. Each tier shall disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Certifications and disclosures are forwarded from tier to tier up to the Owner. Necessary certification and disclosure forms shall be provided by Owner.

18.12 *Environmental Requirements*

- A. When constructing a project involving trenching and/or other related earth excavations, Contractor shall comply with the following environmental constraints:
1. Wetlands – When disposing of excess, spoil, or other construction materials on public or private property, Contractor shall not fill in or otherwise convert wetlands.
  2. Floodplains – When disposing of excess, spoil, or other construction materials on public or private property, Contractor shall not fill in or otherwise convert 100 year floodplain areas delineated on the latest Federal Emergency Management Agency Floodplain Maps, or other appropriate maps, i.e., alluvial soils on NRCS Soil Survey Maps.
  3. Historic Preservation – Any excavation by Contractor that uncovers an historical or archaeological artifact shall be immediately reported to Owner and a representative of Agency. Construction shall be temporarily halted pending the notification process and further directions issued by Agency after consultation with the State Historic Preservation Officer (SHPO).
  4. Endangered Species – Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of Contractor, Contractor will immediately report this evidence to Owner and a representative of Agency. Construction shall be temporarily halted pending the notification process and further directions issued by Agency after consultation with the U.S. Fish and Wildlife Service.

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## Supplementary Conditions

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract Funding Agency Edition (No. C-710, 2002 Edition) and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

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#### **SC-1.01.A.2. Add the following language to the end of Paragraph 1.01.A.2:**

The Project is financed in whole or in part by USDA Rural Utilities Service pursuant to the Consolidated Farm and Rural Development Act (7 USC Section 1921 et seq.). The Rural Utilities Service programs are administered through the USDA Rural Development offices, therefore, the Agency for these documents is USDA Rural Development. As necessary add other funding sources and describe their involvement below:

#### **SC-1.01.A.4. Add the following language to the end of Paragraph 1.01.A.4:**

The Application for Payment form to be used on this Project is EJCDC No. C-620. The Agency must approve all Applications for Payment before payment is made.

#### **SC-1.01.A.10. Add the following language to the end of Paragraph 1.01.A.10:**

The Change Order form to be used on this Project is EJCDC No. C-941. Agency approval is required before Change Orders are effective.

**SC-1.01.A.21. Add the following language to the end of Paragraph 1.01.A.21:**

The Engineer's Consultants on this project are:

**SC-2.03.A. Delete Paragraph 2.03.A in its entirety and insert the following in its place:**

- A. The Contract Times will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement.

**SC-4.02. (Select one of the following options by checking the box and completing any necessary information)**

☐ **Add the following new paragraphs immediately after Paragraph 4.02.B:**

- C In the preparation of Drawings and Specifications, Engineer relied upon the following reports of exploration and tests of subsurface conditions at the Site:
- D. In the preparation of Drawings and Specifications, Engineer relied upon the following drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities) which are at or contiguous to the Site:
- E. Copies of reports and drawings itemized in SC-4.02.C and SC-4.02.D that are not included with Bidding Documents may be examined at:

during regular business hours. These reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which the Contractor may rely as identified and established above are incorporated therein by reference. Contractor is not entitled to rely upon other information and data utilized by Engineer in the preparation of the Drawings and Specifications.

**OR**

☐ **Delete Paragraphs 4.02.A and 4.02.B in their entirety and insert the following:**

- A. No reports or explorations or tests of subsurface conditions at or contiguous to the Site are known to the Owner or Engineer.



**SC-4.06. (Select one of the following options by checking the box and completing any necessary information)**

☐ **Add the following new paragraphs immediately after Paragraph 4.06.A:**

1. In the preparation of Drawings and Specifications, Engineer relied upon the following reports of Hazardous Environmental Conditions at the Site:
2. In the preparation of Drawings and Specifications, Engineer relied upon the following drawings of Hazardous Environmental Conditions which are at or contiguous to the Site:
3. Copies of reports and drawings itemized in SC-4.06.A.1 and SC-4.06.A.2 that are not included with Bidding Documents may be examined at:

during regular business hours. These reports and drawings are not part of the Contract Documents, but the “technical data” contained therein upon which the Contractor may rely as identified and established above are incorporated therein by reference. Contractor is not entitled to rely upon other information and data utilized by Engineer in the preparation of the Drawings and Specifications.

**OR**

☐ **Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following:**

- A. No reports or explorations or tests of subsurface conditions at or contiguous to the Site are known to the Owner or Engineer.

**SC-5.03. Add the following new paragraph immediately after Paragraph 5.03.B:**

- C. Failure of the Owner to demand such certificates or other evidence of full compliance with these insurance requirements or failure of the Owner to identify a deficiency from evidence provided shall not be construed as a waiver of Contractor’s obligation to maintain such insurance.

**SC-5.04. Add the following new paragraph immediately after Paragraph 5.04.B:**

- C. The limits of liability for insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
  1. Workers’ Compensation, and related coverages under Paragraphs 5.04.A.1 and A.2 of the General Conditions:
    - a. State: Statutory
    - b. Applicable Federal (e.g., Longshoremen’s) Statutory
    - c. Employer’s Liability

2. Contractor's General Liability under Paragraphs 5.04.A.3 through A.6 of the General Conditions which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody, and control of the Contractor:
  - a. General Aggregate
  - b. Products - Completed Operations Aggregate
  - c. Personal and Advertising Injury
  - d. Each Occurrence (Bodily Injury and Property Damage)
  - e. Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.
  - f. Excess or Umbrella Liability
    - 1) General Aggregate
    - 2) Each Occurrence
3. Automobile Liability under Paragraph 5.04.A.6 of the General Conditions:
  - a. Bodily Injury:  
Each Person  
Each Accident
  - b. Property Damage:  
Each Accident
  - c. Combined Single Limit of
4. The Contractual Liability coverage required by paragraph 5.04.B.4 of the General Conditions shall provide coverage for not less than the following amounts:
  - a. Bodily Injury:  
Each Person  
Each Accident
  - b. Property Damage:  
Each Accident  
Annual Aggregate
5. List additional types and amounts of insurance that may be required by Owner:
6. List by name other persons or entities to be included on policy as additional insureds:

**SC-5.06.A. (Select one of the following options by checking the box and completing any necessary information)**

☐ A single prime contractor will be selected for this project. Do not modify SC-5.06.

☐ Multiple prime contractors will be on a single Site. Define the Contractor responsible for providing the Property Insurance:

**SC-5.06.A.1. List by name other persons or entities to be included on policy as additional insureds:**

**SC-6.05.C. Amend the paragraph by making two subparagraphs under the title C. Engineer's Evaluation. The paragraph text is retitled, 6.05.C.2 After Effective Date of Agreement. A new paragraph is added before this paragraph to read as follows:**

1. During Bidding. The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or "or-equal" materials and equipment as defined in paragraph 6.05 of the General Conditions, or those substitute materials and equipment approved by the Engineer and identified by Addendum. The materials and equipment described in the Bidding Documents establish a standard of required type, function, and quality to be met by any proposed substitute or "or-equal" item. Request for Engineer's clarification of materials and equipment considered "or-equal" prior to the Effective Date of the Agreement must be received by the Engineer at least 5 days prior to the date for receipt of Bids. No item of material or equipment will be considered by Engineer as a substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each request shall conform to the requirements of Paragraph 6.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon the Bidder. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any proposed substitute item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

**SC-6.06 Add a new paragraph immediately after Paragraph 6.06.G:**

H. The Contractor shall not award work valued at more than fifty (50%) percent of the Contract Price to Subcontractor(s), without prior written approval of the Owner.

**SC-7.01.A. If the Owner is planning to have Work performed by more than one prime contractor, by Owner, or others, it should be specifically stated here:**

**SC-7.02.A.1. (Select one of the following options by checking *the box and completing any necessary information*)**

☐ Multiple prime contractors are working on a single Site. Delete paragraphs 7.02.A.1-3 in their entirety and insert the following:

1. The Contractor shall have the authority and be responsible for coordination of the activities among the other prime contractors and subcontractors on the Site to ensure a safe, efficient working environment. This authority covers scheduling delivery of materials, storage of materials, sequencing of construction involving different crafts, resolving interface issues between crafts, scheduling testing, and all other aspects of the Work that do not impact the design or function of the Work.

☐ Only one prime contractor is working on the project site. Do not modify SC-7.02.A.1.

**SC-9.03.A. Add the following language at the end of paragraph 9.03.A:**

The Engineer will provide Resident Project Representative services for this project. The Duties, Responsibilities, and Limitations of Authority of the Resident Project Representative will be as stated in Exhibit D of the Agreement Between Owner and Engineer, E-510, 2002 Edition, as amended and executed for this specific Project. If anyone other than the Engineer is providing the Resident Project Representative, identify them here and describe how this arrangement will function:

**SC-14.02.A.3 Add the following language at the end of paragraph 14.02.A.3:**

No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage, or invest the retainage for the benefit of the Contractor.

**SC-14.02.C.1. Delete Paragraph 14.02.C.1 in its entirety and insert the following in its place:**

1. The Application for Payment with Engineer's recommendations will be presented to the Owner and Agency for consideration. If both the Owner and Agency find the Application for Payment acceptable, the recommended amount less any reduction under the provisions of Paragraph 14.02.D will become due ten days after the Application for Payment is presented to the Owner, and the Owner will make payment to the Contractor.

**SC-17.05. (Select one of the following options by checking *the box and completing any necessary information*)**

☐ *The project owner is a Tribe. Add a new paragraph immediately after Paragraph 17.05.A:*

B. Tribal Sovereignty. No provision of this Agreement will be construed by any of the signatories as abridging or debilitating any sovereign powers of the \_\_\_\_\_; affecting the trust-beneficiary relationship between the Secretary of the Interior, Tribe, and Indian landowner(s); or interfering with the government-to-government relationship between the United States and the Tribe.

☐ *The project owner is not a Tribe. Do not modify SC-17.05.*

**SC-18.08 Delete paragraph 18.08.A in its entirety and insert the following in its place:**

A. If this Contract exceeds \$100,000, the Contractor shall comply with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 USC §1857(h)), Section 508 of the Clean Water Act (33 USC §1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15).

# PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## CONTRACT

Date:

Amount:

Description (Name and Location):

## BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By: \_\_\_\_\_

Signature and Title

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest: \_\_\_\_\_

Signature and Title

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By: \_\_\_\_\_

Signature and Title

(Attach Power of Attorney)

Attest: \_\_\_\_\_

Signature and Title:

EJCDC No. C-615 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with Contractor:

1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

## 15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

**FOR INFORMATION ONLY – Name, Address and Telephone**

**Surety Agency or Broker:**

**Owner's Representative (engineer or other party):**

# PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## CONTRACT

Date:

Amount:

Description (Name and Location):

## BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

(Space is provided below for signatures of additional parties, if required.)

### CONTRACTOR AS PRINCIPAL

Company:

Signature: \_\_\_\_\_ (Seal)

Name and Title:

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

Attest:

Signature and Title

### SURETY

\_\_\_\_\_  
(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

Attest:

Signature and Title:

EJCDC No. C-610 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.

2. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.

3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:

3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and

3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and

3.3. Owner has agreed to pay the Balance of the Contract Price to:

1. Surety in accordance with the terms of the Contract;
2. Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.

4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:

4.1. Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
2. Deny liability in whole or in part and notify Owner citing reasons therefor.

5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;

6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.

7. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.

8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1. Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.

12.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3. Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone  
Surety Agency or Broker  
Owner's Representative (engineer or other party)



# Contractor's Application For Payment No. \_\_\_\_\_

|                       |                           |                         |
|-----------------------|---------------------------|-------------------------|
|                       | Application Period:       | Application Date:       |
| To (Owner):           | From (Contractor):        | Via (Engineer)          |
| Project:              | Contract:                 |                         |
| Owner's Contract No.: | Contractor's Project No.: | Engineer's Project No.: |

## APPLICATION FOR PAYMENT

### Change Order Summary

| Approved Change Orders         |           |            |
|--------------------------------|-----------|------------|
| Number                         | Additions | Deductions |
|                                |           |            |
|                                |           |            |
|                                |           |            |
|                                |           |            |
|                                |           |            |
|                                |           |            |
|                                |           |            |
|                                |           |            |
| TOTALS                         |           |            |
| NET CHANGE BY<br>CHANGE ORDERS |           |            |

|   |    |       |
|---|----|-------|
| 1. ORIGINAL CONTRACT PRICE.....   | \$ | _____ |
| 2. Net change by Change Orders.....   | \$ | _____ |
| 3. CURRENT CONTRACT PRICE (Line 1 ± 2).....   | \$ | _____ |
| 4. TOTAL COMPLETED AND STORED TO DATE<br>(Column F on Progress Estimate) .....              | \$ | _____ |
| 5. RETAINAGE:   |    |       |
| a. _____ % x \$ _____ Work Completed.....   | \$ | _____ |
| b. _____ % x \$ _____ Stored Material .....   | \$ | _____ |
| c. Total Retainage (Line 5a + Line 5b) .....  | \$ | _____ |
| 6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5c).....  | \$ | _____ |
| 7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application) .....                             | \$ | _____ |
| 8. AMOUNT DUE THIS APPLICATION.....   | \$ | _____ |
| 9. BALANCE TO FINISH, PLUS RETAINAGE<br>(Column G on Progress Estimate + Line 5 above)..... | \$ | _____ |

## CONTRACTOR'S CERTIFICATION

The undersigned Contractor certifies that: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

|     |       |
|-----|-------|
| By: | Date: |
|-----|-------|

|                    |                                |  |        |
|--------------------|--------------------------------|--|--------|
| Payment of:        | \$                             | _____  |        |
|                    |                                | (Line 8 or other - attach explanation of other amount) |        |
| is recommended by: | _____                          | _____  | _____  |
|                    | (Engineer)                     |  | (Date) |
| Payment of:        | \$                             | _____  |        |
|                    |                                | (Line 8 or other - attach explanation of other amount) |        |
| is approved by:    | _____                          | _____  | _____  |
|                    | (Owner)                        |  | (Date) |
| Approved by:       | _____                          | _____  | _____  |
|                    | Funding Agency (if applicable) |  | (Date) |

## Progress Estimate

## Contractor's Application

[illegible]

## Progress Estimate

## Contractor's Application

| For (contract):     |             |              |            |           |                                 | Application Number: |  |  |               |                              |
|---------------------|-------------|--------------|------------|-----------|---------------------------------|---------------------|--|--|---------------|------------------------------|
| Application Period: |             |              |            |           |                                 | Application Date:   |  |  |               |                              |
| A                   |             |              |            | B         | C                               | D                   | E  | F  |               | G                            |
| Item                |             | Bid Quantity | Unit Price | Bid Value | Estimated<br>Quantity Installed | Value               | Materials Presently Stored<br>(not in C) | Total Completed and Stored to Date (D + E) | %<br>(E)<br>B | Balance to Finish<br>(G - F) |
| Bid Item No.        | Description |              |            |           |                                 |                     |  |  |               |                              |
|                     |             |              |            |           |                                 |                     |  |  |               |                              |
|                     | Totals      |              |            |           |                                 |                     |  |  |               |                              |

## Stored Material Summary

## Contractor's Application

| For (contract):     |                              |                       |                   |             | Application Number: |          |                      |             |   |
|---------------------|------------------------------|-----------------------|-------------------|-------------|---------------------|----------|----------------------|-------------|---|
| Application Period: |                              |                       |                   |             | Application Date:   |          |                      |             |   |
| A                   | B                            | C                     | D                 |             | E                   | F        |                      | G           |   |
| Invoice No.         | Shop Drawing Transmittal No. | Materials Description | Stored Previously |             | Stored this Month   |          | Incorporated in Work |             | Materials Remaining in Storage (\$) (D + E - F) |
|                     |                              |                       | Date (Month/Year) | Amount (\$) | Amount (\$)         | Subtotal | Date (Month/Year)    | Amount (\$) |   |
|                     |                              |                       |                   |             |                     |          |                      |             |   |
|                     |                              | Totals                |                   |             |                     |          |                      |             |   |

# Change Order

No. \_\_\_\_\_

Date of Issuance: \_\_\_\_\_ Effective Date: \_\_\_\_\_

|             |        |                         |
|-------------|--------|-------------------------|
| Project:    | Owner: | Owner's Contract No.:   |
| Contract:   |        | Date of Contract:       |
| Contractor: |        | Engineer's Project No.: |

## The Contract Documents are modified as follows upon execution of this Change Order:

Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attachments: (List documents supporting change): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

| CHANGE IN CONTRACT PRICE:  | CHANGE IN CONTRACT TIMES:  |
|--|--|
| Original Contract Price:<br><br>\$ _____   | Original Contract Times: <input type="checkbox"/> Working days <input type="checkbox"/> Calendar days<br>Substantial completion (days or date): _____<br>Ready for final payment (days or date): _____ |
| [Increase] [Decrease] from previously approved Change Orders No. _____ to No. _____:<br><br>\$ _____ | [Increase] [Decrease] from previously approved Change Orders No. _____ to No. _____:<br>Substantial completion (days): _____<br>Ready for final payment (days): _____                                  |
| Contract Price prior to this Change Order:<br><br>\$ _____   | Contract Times prior to this Change Order:<br>Substantial completion (days or date): _____<br>Ready for final payment (days or date): _____  |
| [Increase] [Decrease] of this Change Order:<br><br>\$ _____  | [Increase] [Decrease] of this Change Order:<br>Substantial completion (days or date): _____<br>Ready for final payment (days or date): _____   |
| Contract Price incorporating this Change Order:<br><br>\$ _____                                      | Contract Times with all approved Change Orders:<br>Substantial completion (days or date): _____<br>Ready for final payment (days or date): _____   |

| RECOMMENDED:                                      | ACCEPTED:                                 | ACCEPTED:                                      |
|---|---|--|
| By: _____<br>Engineer (Authorized Signature)      | By: _____<br>Owner (Authorized Signature) | By: _____<br>Contractor (Authorized Signature) |
| Date: _____                                       | Date: _____                               | Date: _____                                    |
| Approved by Funding Agency (if applicable): _____ |   | Date: _____                                    |

# Change Order

## Instructions

---

### A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

### B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

**RECORD OF PRE-CONSTRUCTION CONFERENCE**

DATE:

|                                    |   |
|------------------------------------|---|
| NAME OF ASSOCIATION                | ADDRESS <i>(Including Zip Code and Telephone)</i> |
| NAME OF CONSULTING ENGINEER (FIRM) | ADDRESS <i>(Including Zip Code and Telephone)</i> |
| NAME OF CONTRACTOR (FIRM)          | ADDRESS <i>(Including Zip Code and Telephone)</i> |

LOCATION OF CONFERENCE

**SUBJECTS TO BE DISCUSSED**

1. Identification of Official Representatives of Association, Architect, Engineer, Contractor and Agency:

ASSOCIATION: \_\_\_\_\_ ARCHITECT/ENGINEER \_\_\_\_\_

HEADQUARTERS: \_\_\_\_\_ HEADQUARTERS: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ AGENCY: \_\_\_\_\_

HEADQUARTERS: \_\_\_\_\_ HEADQUARTERS: \_\_\_\_\_

2. Responsibilities of Consulting Architect/Engineer: *(Does not "supervise" the contractor's employees, equipment or operations.)*

\_\_\_\_\_  
\_\_\_\_\_

3. Responsibilities of Association's: *(Actual contracting Organization.)*

\_\_\_\_\_  
\_\_\_\_\_

4. Responsibilities of Agency Representative: *(Must see that approval conditions are observed and represents the Government's interests.)*

\_\_\_\_\_  
\_\_\_\_\_

5. Responsibilities of Contractor: *(Review contract terms.)*

\_\_\_\_\_  
\_\_\_\_\_

6. Responsibilities of Any Other Agency Contributing to the Project:

\_\_\_\_\_  
\_\_\_\_\_

7. General Discussion of Contract:

A. Alternative Specifications: *(Does everyone understand the alternatives applicable to the contract as awarded?)*

\_\_\_\_\_  
\_\_\_\_\_

B. Initiative Construction: *(Notice to Proceed.)*

\_\_\_\_\_  
\_\_\_\_\_

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C. Completion Time for Contract. *(Does everyone understand contract requirements and methods of Computing?)*

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D. Liquidated Damages:

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E. Requests for Extension of Contract Time:

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F. Procedures for Making Partial Payments:

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G. Guarantee on Completed Works: *(Materials, Installed Equipment, Workmanship, Etc.)*

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H. Other Requirements of the Contract and Specifications which Deserve Special Discussions by All Parties.

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8. Contractor's Schedule:

A. Analyze Work Schedule in Sufficient Detail to Enable Consulting Engineer to Plan His Operations: *(Consideration must be given to needs of Association and the planned operations of other contractors.)*

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B. Equipment to be Used by Contractor:

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c. Contractor's Plans for Delivering Materials to Project Site: *(Protection and Storage of Materials.)*

---

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---

9. Sub-Contracts: *(Review and approval of proposed Sub-Contractors and their work schedules.)*

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---

---

10. Status of Materials Furnished by Association:

A. Schedule for Future Deliveries:

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B. Procedures to be Adopted by Contractor in Accounting for and Storing Such Materials:

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11. Change Orders: *(Detailed explanation of procedure to be followed and clearance which must be obtained before changes are implemented.)*

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12. Staking of Work: *(Clearly Define responsibilities of Architect/Engineer and Contractor. Line and Grade must be furnished by Architect.)*

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13. Project Inspection:

A. Functions of Consulting Architect/Engineer. Including Records and Reports:

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B. Responsibilities of Owner:

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C. Responsibilities of Agency:

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D. Safety and Sanitary Regulations:

---

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14. Final Acceptance of Work: *(Include requirements for tests and cleanup of project site.)*

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15. Labor Requirements:

A. Equal Employment Opportunity Requirements:

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B. Davis-Bacon Act:

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C. Other Federal Requirements:

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D. State and Local Requirements:

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---

E. Union Agreements:

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---

F. Reprots Required:

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16 Equal Employment Provisions of Contract:

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17. Rights-of-Way and Easements:  
A. Explain any Portion of Project Not Available to Contractor:

---

B. Contractors Responsibilities During Work Covered by Contract:

---

C. Coordination With Railroads, Highway Departments and Other Organizations:

---

18. Placement of Project Signs and Posters:

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19. Handling Disputes:

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NOTED AND CONCURRED WITH, *But understood not to be a modification of any existing contracts or agreements:*

|  |   |
|--|---|
| <i>(Signatures of Members of Governing Board of Association)</i> | <hr/> <i>(Contractor Representative)</i>                    |
| <hr/> <i>(Chairman)</i>  | <hr/> <i>(Contractor Representative)</i>                    |
| <hr/> <i>(Board Member)</i>                                      | <hr/> <i>(Contractor Representative)</i>                    |
| <hr/> <i>(Board Member)</i>                                      | <hr/> <i>(Consulting Architect/Engineer Representative)</i> |
| <hr/>  | <hr/> <i>(Agency Representative)</i>                        |
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## RECORD OF PRE-CONSTRUCTION CONFERENCE

DATE:

|  |  |
|--|--|
| NAME OF OWNER                                | ADDRESS (including Zip Code and Telephone)<br><br>Fax: |
| NAME OF CONSULTING ENGINEER/ARCHITECT (FIRM) | ADDRESS (including Zip Code and Telephone)<br><br>Fax: |
| NAME OF CONTRACTOR (FIRM)                    | ADDRESS (including Zip Code and Telephone)<br><br>Fax: |
| LOCATION OF CONFERENCE                       |  |

### SUBJECTS TO BE DISCUSSED

---

#### 1. Identification of Official Representatives of Owner, Engineer/Architect, Contractor, Block Grant

##### Administrator, & USDA-RD

|            |                         |
|------------|-------------------------|
| OWNER:     | ARCHITECT/<br>ENGINEER: |
|            |                         |
|            | INSPECTOR:              |
|            |                         |
| ADDRESS:   | ADDRESS:                |
|            |                         |
| CONTRACTOR | Block Grant<br>Admin:   |
|            |                         |
| ADDRESS:   | ADDRESS:                |
|            |                         |
| USDA,RD:   | PHONE:                  |
|            |                         |
| ADDRESS:   |                         |
|            |                         |
| PHONE:     |                         |
|            |                         |

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2. **Responsibilities of Consulting Engineer/Architect: (Does not "supervise" the contractor's employees, equipment or operations.)**

Assure owner obtains desired facility. Certifies payment estimates. Prepares any change orders. Requests any other funding as soon as allowed. General review of the work by a registered professional engineer/architect. Supervises resident inspector. Issue Statements of Substantial Completion. Provide as-built drawings. Approves shop drawings.

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3. **Responsibilities of Owner's Governing Body: (Actual contracting Organization)**

Monitors consultant, inspector & contractor's activities and provides RD with a narrative each month explaining (1) any schedule slippage; (2) quantity overruns (analysis & explanation); (3) any significant problems, delays, or adverse conditions and the action taken or contemplated to resolve immediately; (4) any favorable developments. Approves change orders and payment estimates. Member of final inspection team. Works through engineer/architect

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4. **Responsibilities of Block Grant Administrator:**

(see attached Block Grant Preconstruction Conference Checklist)

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5. **Responsibilities of RD Specialist (Must see that approval conditions are observed and represents the Government's interests.)**

Monitors construction. Signs acceptance of payment estimates. Signs acceptance of change orders if less than \$15,000 & no major technical change, otherwise forwarded to RD State Director. Order funds only when and in amount needed.

---

6. **Responsibilities of Contractor: (Review contract terms.)**

Furnished all materials, labor, and equipment necessary to construct per plans & specifications. Notifies engineer/architect of any discrepancies. Completes job on schedule.

---

7. **Responsibilities of Any Other Agency Contributing to the Project:**

---

8. **General Discussions of Contract:**

A. **Alternative Specifications-** (Does everyone understand the alternatives applicable to the contract as awarded)?

B. **Initiating Construction: (Notice to Proceed):** \_\_\_\_\_

C. **Completion Time for Contract:** \_\_\_\_\_ days to substantial completion and \_\_\_\_\_ days to final completion.

D. **Liquidated Damages:** \$\_\_\_\_\_ per day for delay of substantial completion and \$\_\_\_\_\_ per day for delay of time between substantial completion and project completion.

F. **Requests for Extension of Contract Time:**

Must be made with a change order in writing to consultant or owner promptly.

G. **Procedures for Making Partial Payments:**

Partial payment estimate prepared on the \_\_\_\_\_ of each month. Must use Form RD 1924-18, or the certifications therefrom on a form similar to EJCDC 1910-8-E, or add certification statement and signature blocks therefrom. Engineer/Architect may withhold payment if defective work is not remedied; if the contractor is behind his schedule. \_\_\_\_\_% retainage.

H. **Guarantee on Completed Work: (Materials, Installed Equipment, Workmanship, Etc.)**

One year after substantial completion. Performance Bond in effect one year after final acceptance.

- I. **Other Requirements of the Contract and Specifications which Deserve Special Discussions by All Parties:**  
See attached engineer's/architect's preconstruction conference checklist  
Environmental/Cultural issues; mitigation measures
- 

9. **Contractors Schedule and Other Personnel:**

**Construction Manager:** \_\_\_\_\_ **mobile phone:** \_\_\_\_\_  
**Other:** \_\_\_\_\_ **mobile phone:** \_\_\_\_\_

- A. **Analyze Work Schedule in Sufficient Detail to Enable Consulting Engineer/Architect to Plan His Operations:** (Consideration must be given to needs of Owner and the planned operations of other contractors.)

Contractor will provide work schedule to Engineer/Architect as soon as possible.

Schedule showing monthly quantity completion for major items must be furnished before first payment estimate.  
Send copy to USDA-RD Area Office.

- B. **Equipment to be used by Contractor:**

- C. **Contractor's Plans for Delivering Materials to Project Site: (Protection and storage of Materials.)** as per contract documents
- 

10. **Sub-Contracts: (Review and approval of proposed Sub-Contractors and their work schedules.)**

---

11. **Status of Materials Furnished by Owner:**

- A. **Schedule for Future Deliveries:**

- B. **Procedures to be adopted by contractor in accounting for and storing such materials:**

- C. **Other:** Storage Location
- 

12. **Change Orders:** (Detailed explanation of procedure to be followed and clearance, which must be obtained before changes are implemented.)

Use Form RD 1924-7 or EJCDC 1910-6-B with a RD approval signature block added. Required before additional work accomplished including quantity overruns. Estimate overruns, final cleanup change order. Use unit prices bid or if not applicable, negotiated unit or lump sum prices. Contractor warned may not be paid for changes if not covered by fully approved change order. Call for verbal approval if holding up work.

Change Orders Proposed at this time:

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**13. Staking of Work: (Clearly Define responsibilities of Engineer/Architect and Contractor. Engineer/Architect must furnish Line and Grade.)**

Engineer/Architect to furnish baseline and bench marks per contract

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**14. Project Inspection:**

- A. **Functions of Consulting Engineer/Architect, including Records and Reports:** All inspections must be recorded each day, in a hardbound book with consecutively numbered pages in ink so as to be acceptable in a court of law. Copy of page entries made available to RD Area Office, if requested.
  - B. **Responsibilities of Owner:** Monitor, pre-final, final inspection, 11-month inspection after substantial completion.
  - C. **Responsibilities of USDA-RD:** Same as owners.
  - D. **Safety and Sanitary Regulations:** OSHA and-AGC's Manual.
- 

**15. Final Acceptance of Work: (include requirements for tests and cleanup of project site.)**

When everything 100% complete.

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**16. Labor Requirements:**

- A. **Equal Employment Opportunity Requirements:**  
No discrimination. Want ads to state and EO employers. EO provisions to be put in sub-contracts over \$10,000. Written policy on EO communicated all employees. Have certified: facilities for employees are not segregated. If over 50 employees & \$50,000 contract, Affirmative Action Plan.
  - B. **Davis-Bacon Act:**  
Idaho Community Development Block Grant funding requires Davis-Bacon Wage Rates for all workers.
  - C. **Other Federal Requirements:** Copeland Anti-Kickback law.
  - D. **Other State and Local Requirements:** Contractor is responsible to adhere to other State and local laws and regulations, not specified in the contract, pertaining to construction and construction related matters.
  - E. **Union Agreements:** Send non-discrimination notice to any unions involved.
  - F. **Reports Required:** Complete Form CC-257, "Monthly Employment Utilization Report" on a monthly basis and keep on file. If over 100 employees, file SF 100 within 30 days of award and annually on or before March 31 of each year. If over \$50,000 contract and 50 employees, within 120 days of award file a written Affirmative Action Plan.
- 

**17. Equal Employment Provisions of Contract:**

Covered in RD Supplemental General Conditions OR in EJCDC - FA General Conditions. Contractors given Form RD 400-3 and required poster.

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**18. Rights-of-Way and Easements:**

- A. **Explain any Portion of Project not available to Contractor:**
- B. **Contractor's Responsibilities During Work Covered by Contract:**  
Protect adjacent property.
- C. **Coordination with Railroads, highway departments and other organizations:**

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19. **Placement of Poster:**

RD Equal Opportunity Poster in office where hiring and on job trailer.

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20. **Placement of Project Sign:**

Provide contractor with information for project sign. Location of sign.

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21. **Handling Disputes:** First try informally in conference with all parties.

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NOTED AND CONCURRED WITH, But understood not to be a modification of any existing contracts or agreements:

(Signature of Owner)

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(Mayor, President, or Chairman)

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(Contractor Representative)

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(Council/Board Member)

---

(Contractor Representative)

---

(Council/Board Member)

---

(Consulting Engineer/Architect Representative)

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(Rural Development Representative)

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(Block Grant Administrator)

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# Notice to Proceed

Dated \_\_\_\_\_

|   |                         |                       |
|---|-------------------------|-----------------------|
| Project:  | Owner:                  | Owner's Contract No.: |
| Contract:   | Engineer's Project No.: |                       |
| Contractor:   |                         |                       |
| Contractor's Address: [send Certified Mail, Return Receipt Requested] |                         |                       |
|   |                         |                       |
|   |                         |                       |
|   |                         |                       |
|   |                         |                       |

You are notified that the Contract Times under the above contract will commence to run on \_\_\_\_\_. On or before that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 4 of the Agreement, the date of Substantial Completion is \_\_\_\_\_, and the date of readiness for final payment is \_\_\_\_\_ [(or) the number of days to achieve Substantial Completion is \_\_\_\_\_, and the number of days to achieve readiness for final payment is \_\_\_\_\_].

Before you may start any Work at the Site, Paragraph 2.01.B of the General Conditions provides that you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must [add other requirements]:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Owner

Given by:

Authorized Signature

Title

Date

Copy to Engineer

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**A project financed by:**



Committed to the future of rural communities.

**George W. Bush**  
**President of the United States**

**Ann M. Veneman**  
**Secretary of Agriculture**

**Michael A. Field**  
**State Director**

**Loan Amount:**

**\$**

**Grant Amount:**

**\$**

**Applicant contribution:**

**\$**

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FUNDED BY:



Committed to the future of rural communities.



## U.S. Department of Housing and Urban Development

George W. Bush, President



DIRK KEMPTHORNE, Governor

## Idaho Department of Commerce

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FUNDED BY:



Committed to the future of rural communities.



# United States Environmental Protection Agency

George W. Bush, President

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# Certificate of Substantial Completion

|             |        |                         |
|-------------|--------|-------------------------|
| Project:    | Owner: | Owner's Contract No.:   |
| Contract:   |        | Date of Contract:       |
| Contractor: |        | Engineer's Project No.: |

This [tentative] [definitive] Certificate of Substantial Completion applies to:

- ☐ All Work under the Contract Documents: ☐ The following specified portions:

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\_\_\_\_\_  
Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby declared and is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below.

A [tentative] [revised tentative] [definitive] list of items to be completed or corrected, is attached hereto. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

**The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as provided in the Contract Documents except as amended as follows:**

- ☐ Amended Responsibilities ☐ Not Amended

Owner's Amended Responsibilities:

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Contractor's Amended Responsibilities:

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The following documents are attached to and made part of this Certificate:

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This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

\_\_\_\_\_  
Executed by Engineer

\_\_\_\_\_  
Date

\_\_\_\_\_  
Accepted by Contractor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Accepted by Owner

\_\_\_\_\_  
Date